

Comprehensive Plan

Town of Woodsboro, Maryland

2008 - 2028



Draft Update: July 14, 2010

The Comprehensive Plan for the Town of Woodsboro, Maryland 2008 – 2028

Draft Update: July 14, 2010

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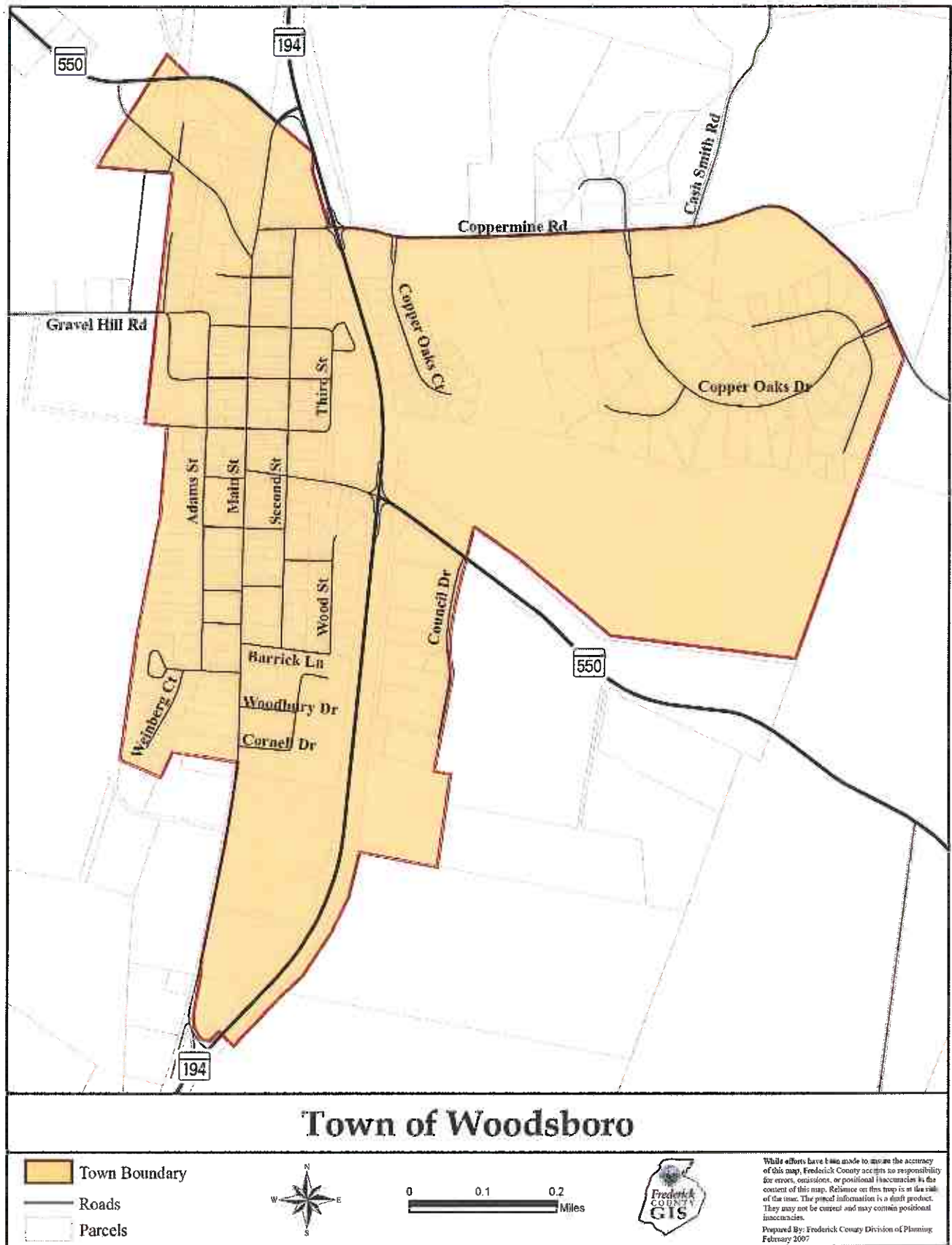
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Chapter 1

Introduction

This chapter offers an introduction to the comprehensive planning process including its definition and purpose. A discussion of state legislation, mandates, and county programs affecting land use planning in the Town of Woodsboro follows. The chapter concludes with a brief review of the Town's 1973 *Comprehensive Development Plan*, which served as a guide for growth and development in the Woodsboro community over the past thirty-five years.

The Comprehensive Plan

The comprehensive plan is an official public document that provides the framework for all activities affecting growth and development in a community. The plan is long-range (20 years) in nature and is organized around a realistic and achievable community vision. The Planning Commission is responsible for preparing the plan, which is adopted by the Town Board of Commissioners. In the State of Maryland, a Planning Commission is required to review and/or update its comprehensive plan every six years. The time range of a comprehensive plan is typically twenty years.

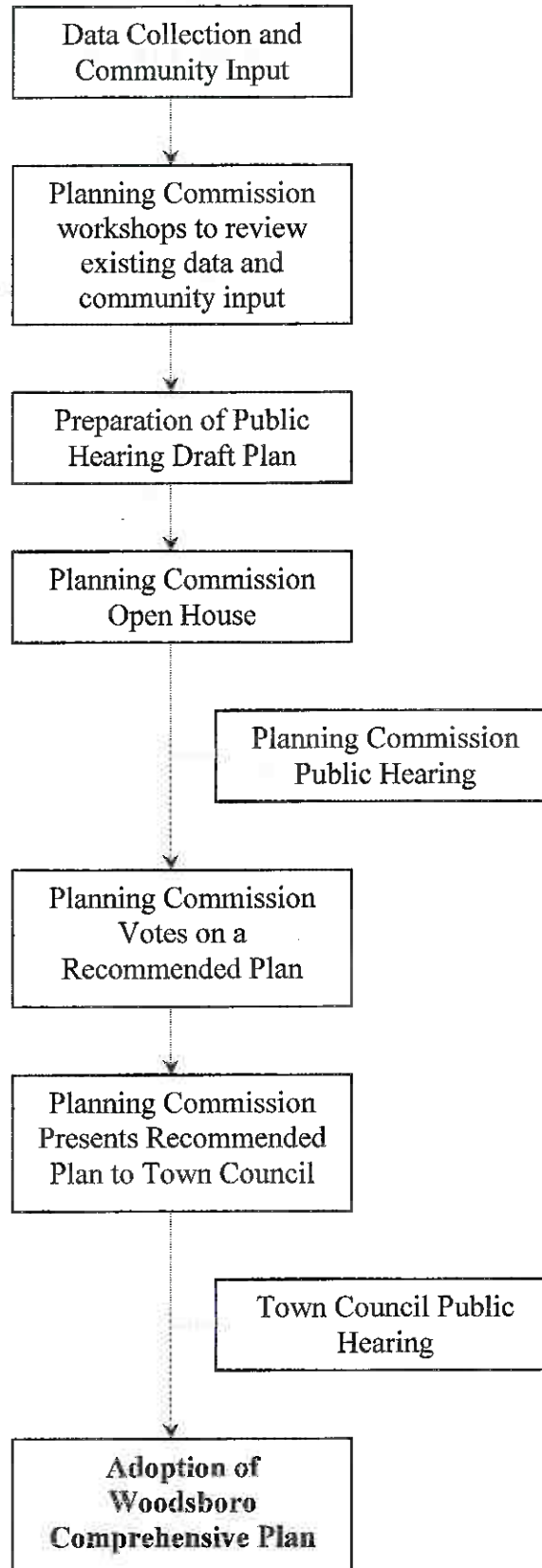
The comprehensive plan provides guidance for decision-making on development proposals (subdivision plans, re-zonings, and annexations) and the planning of infrastructure (roads, sewer and water) and community facilities (parks, town buildings). Within the plan are goals and objectives for managing community resources such as transportation networks, natural and cultural resources, community facilities, housing, land use, and economic development. This structure sets a work program for public officials, citizens, and planners to implement the community vision.

Woodsboro adopted its first and only comprehensive plan on May 31, 1973. At the same time the Town adopted a zoning ordinance and subdivision regulations. The zoning ordinance has received minor periodic updates since its initial adoption. This effort will be the first update of the comprehensive plan. The complete process for Woodsboro's comprehensive plan update is presented in Figure 1.

State Legislation and Mandates

The State of Maryland takes an active role in assisting local jurisdictions in their planning efforts. Below are descriptions of state legislation and mandates related to comprehensive planning and general land use/zoning authority.

Figure 1: Comprehensive Plan Update Process, Town of Woodsboro



Article 66B of the Annotated Code of Maryland, Zoning and Planning

Article 66B, added to the Maryland Annotated Code in 1927, grants non-charter counties and incorporated municipalities basic planning and land use regulatory powers. The statute states the roles, responsibilities and functions of a planning commission and charges local government with the power to guide growth and development.

Under Article 66B, it is the function and duty of the Planning Commission to develop and approve a plan, which is recommended to the local legislative body for adoption. At a minimum, Article 66B requires that a plan include a statement of goals and objectives, principles, policies, and standards, which serve as a guide for the development of the jurisdiction and its economic and social well-being. Elements addressing land use, transportation, community facilities, mineral resources, sensitive areas, and water resources are also required.

State Planning Acts of 1992, 1997, 2006, and 2009

In 1992, the State passed the Economic Growth, Resource Protection, and Planning Act (The Planning Act), which seeks to provide statewide guidance for development in an effort to encourage economic growth, minimize sprawl development, and protect the State's natural resources. The current Planning Act identifies twelve visions or goals that are required to be incorporated into a jurisdiction's comprehensive plan. The most recent iteration of Maryland's planning visions was adopted in 2009's Smart, Green, and Growing Act. The visions are as follows:

- **QUALITY OF LIFE AND SUSTAINABILITY:** A high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment;
- **PUBLIC PARTICIPATION:** Citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals;
- **GROWTH AREAS:** Growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers;
- **COMMUNITY DESIGN:** Compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources;
- **INFRASTRUCTURE:** Growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner;
- **TRANSPORTATION:** A well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods and services within and between population and business centers;
- **HOUSING:** A range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes;
- **ECONOMIC DEVELOPMENT:** Economic development and natural resource-based business that promote employment opportunities for all income levels within the capacity of the State's natural resources, public services, and public facilities are encouraged;

- **ENVIRONMENTAL PROTECTION:** Land and water resources, including the Chesapeake and Coastal Bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources;
- **RESOURCE CONSERVATION:** Waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved;
- **STEWARDSHIP:** Government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection; and
- **IMPLEMENTATION:** Strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, State, and Interstate levels to achieve these visions.

The Planning Act also requires regular review and update of a jurisdiction's master plan every six years in addition to requiring the preparation of a sensitive area element which documents the location of flood plains, steep slopes, and the habitat of endangered and plant and animal species.

Smart Growth and Neighborhood Conservation Act of 1997

In 1997, the General Assembly adopted several specific programs known together as the "Smart Growth Initiatives". The Smart Growth Initiatives are intended to support the concentration of new development within existing communities and/or designated growth areas as well as to protect rural lands from development. One component of the Smart Growth Initiatives is the identification and certification of Priority Funding Areas (PFAs) appropriate for state funding support. County governments follow guidelines to certify PFAs based on their water and sewer service plans, intended land uses, and minimum permitted residential densities. State funding for economic/neighborhood development and/or infrastructure improvements (roads and water/sewer) are then directed to certified PFAs. The Town of Woodsboro is a certified PFA.

Other than the PFA program, the Smart Growth Initiatives established the Rural Legacy program (rural land preservation), brownfields program (redevelopment), Job Creation Tax Credit (revitalization), and Live Near Your Work program (homeownership in older urban areas).

Recent State Planning Legislation

During the 2006 General Assembly, the legislature passed three significant bills affecting land use planning and the comprehensive plan, House Bills (HB) 1141, HB 2, and HB 1160. These bills mandate the inclusion of four new plan elements in municipal and/or County plans. The four elements are: Water Resources, Municipal Growth, Priority Preservation, and Workforce Housing; each are described below.

The **Water Resources Element** requires a municipality to identify adequate drinking water for all existing and future development as well as receiving waters for wastewater and stormwater management for all existing and future development. The intent is for local

governments to specifically address wastewater disposal and safe drinking water availability in their long-range planning efforts. This element must be included in the comprehensive plan no later than October 1, 2009 or the jurisdiction loses its authority to rezone land. Jurisdictions may apply to the state for an extension of the deadline to complete the new plan elements/requirements. Once in compliance, all zoning authority reapplies.

The **Municipal Growth Element** requires municipalities to identify a future growth area that will implement their long-range vision for the future. The delineation of the growth area must be based on population projections, land capacity and needs, and an assessment of infrastructure and sensitive areas, among other things. The legislation encourages partnership with the County government in delineation of the growth area, particularly since it will guide future annexations, a process involving both municipal and county jurisdictions. Joint planning agreements with county governments are also encouraged through this legislation. This element also must be included in the comprehensive plan by October 1, 2009.

Future annexations are affected by this legislation. Where in the past, a municipality needed to show consistency between the County's comprehensive plan and the future intended use, under the new legislation, a municipality must show consistency between the County's current zoning and the future intended use of the parcel to be annexed. Annexations must also be planned for and included in a 20-year municipal growth boundary/future annexation limit line.

The **Priority Preservation Element**, HB 2, is a requirement for the County in order to maintain its agricultural land preservation program certification. The element requires the County to identify priority preservation areas in terms of productivity and/or profitability. It includes criteria for acreage goals and plans for contributing towards statewide preservation goals. This element must be included in the plan by July 1, 2008.

The fourth element is required of local governments interested in being eligible for the Workforce Housing Grant Program, established through HB 1160. The **Workforce Housing Element** should address workforce housing needs and develop goals and priorities for addressing those needs. The bill defines workforce housing as rental housing that is affordable to households with an annual income between 50 percent and 100 percent of the area median income or homeownership housing that is affordable to households with an annual income between 60 percent and 120 percent of the median income. No date has been set for inclusion of this element in the local plan.

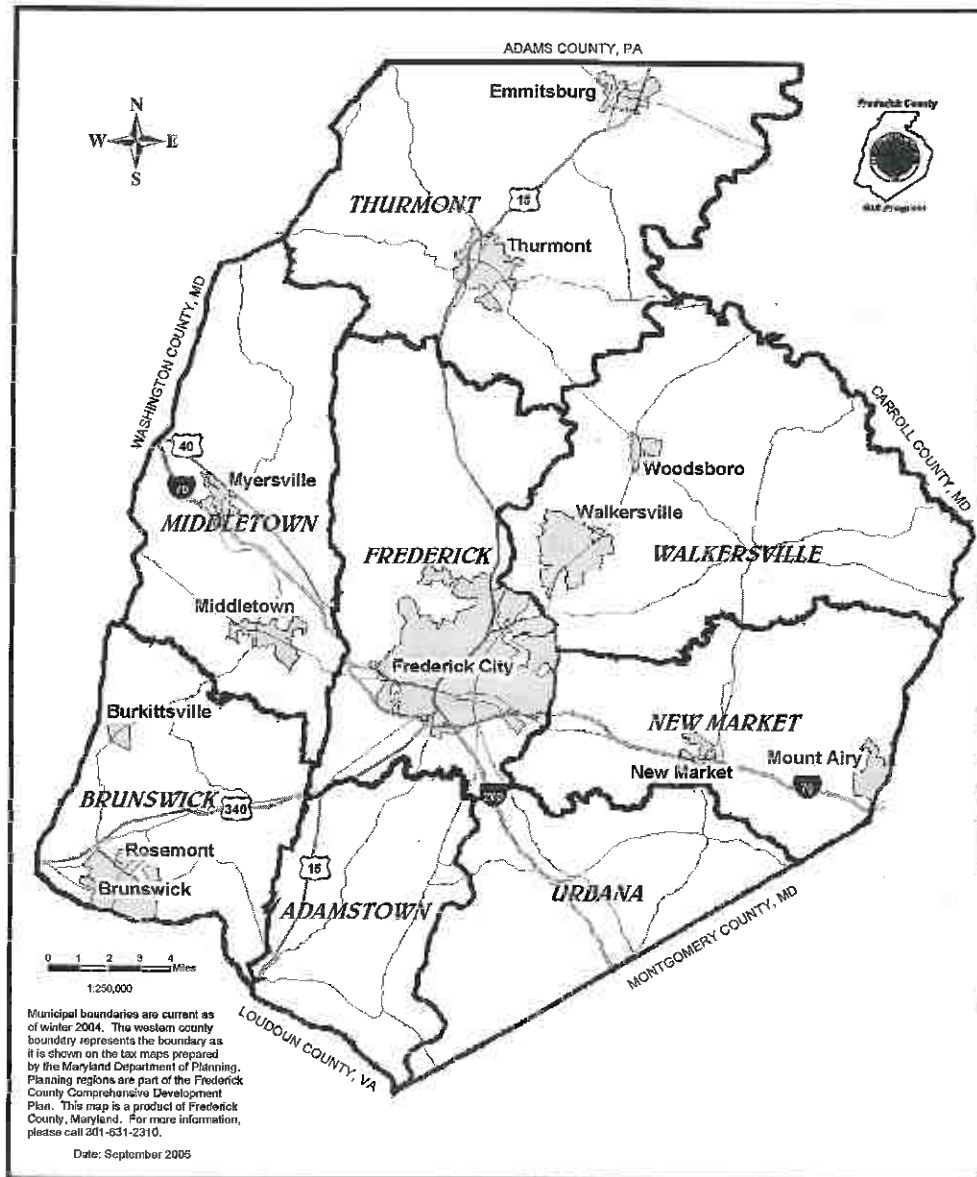
The County's Planning Process

Woodsboro's comprehensive planning is coordinated with the Countywide planning process of the Frederick County Division of Planning. Woodsboro lies within the County's Walkersville Planning Region (one of eight planning regions), defined as the area between the Monocacy River and the Carroll County line, south to Gas House Pike and Upper Linganore Creek (Figure 2). The Board of County Commissioners adopted the most recent Comprehensive Plan for Frederick County on April 8, 2010.

The Frederick County Comprehensive Plan designates Woodsboro as a Community Growth Area (Walkersville and Libertytown are also designated as growth areas in this region) and delineated a 20-year municipal growth boundary (MGB) around the community. Various land uses were proposed for the area within the MGB. The majority of land outside of the MGB is intended for agricultural and rural land uses, which may include limited residential development on properties with remaining subdivision rights.

The County's Community Concept Policy, initiated in 1972 with the Countywide Comprehensive Plan (and reaffirmed in 1984, 1990, 1998, and 2010), targets residential, commercial, and industrial development to compact growth areas in an effort minimize suburban sprawl. The growth areas are primarily municipalities though some unincorporated areas are identified as well (i.e. Libertytown).

Figure 2: Frederick County's Planning Regions and Municipalities



History of Planning in Woodsboro

As mentioned, the Town of Woodsboro adopted its first *Comprehensive Development Plan* in May of 1973, which represented the municipality's initial efforts at establishing planning and zoning controls. The plan includes various hand drawn images and maps detailing the community's vision for land use, transportation, community facilities and services. The results of a community attitude survey, distributed to gain a sense of resident's important issues and concerns, are included in the plan.

Some key proposals highlighted in the 1973 *Plan* include:

- Development of a "Specialty Shops" niche for the Central Business District;

- Construction of a community sanitary sewerage system;
- Establishment of an Interim Land Use Plan characterized by low density development and little residential growth until construction of the sewerage system was complete;
- Implementation of the 20+ year design/planning for the Bypass;
- Construction of a pedestrian overpass for residents to access the Regional Park from downtown; and
- Devise a plan to attract a physician to the Town/Region to meet a critical need expressed by area residents.

1970s Community Attitude Survey – Quick Facts

- 165 delivered - 83 returned (50.3% response rate)
- 89.2% of respondents were homeowners
- Average of 2.9 persons per family
- Median age of respondents - 36
- 28% reported that the occupation of the head of household was retired
- 15% reported that the occupation of the head of household was professional
- 39.8% reported an annual income below \$9,000
- 71.9% work outside of Woodsboro
- 59% said there was no need for cable television in Woodsboro
- 69% said government efficiently serves needs of Woodsboro
- 82% reported that the water supply was meeting Town needs
- 51% expressed a need for recreational facilities; #1 need was Park, #2 was Pool
- Doctor's office was #1 additional facilities or services the Town should provide (#2 was Central Sewer System)
- Doctor's office was also the thing Woodsboro needs most (followed by the Bypass)

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Chapter 2

Community Vision & Implementation

Guiding the comprehensive plan is a realistic and achievable community vision. The community vision conveys what a place will be like in twenty years. There are many directions a community can take. Choosing a desirable future and setting a clear path to get there are important elements of comprehensive planning. Through this process, a community identifies where, when, and how it will grow. Once this is achieved and the community is confident in its direction, they can work together to implement their shared vision.

To set the stage for Woodsboro's vision for the future, Chapter 2 begins with a listing of Maryland's Twelve Visions, each required to be included within the local jurisdiction plan. Next, the Frederick County vision, *Portrait of Frederick County: 2045*, is included for reference. A brief discussion of Woodsboro's 1973 stated goals is offered for comparison and interpretation. Woodsboro's current vision for the future, followed by a series of goals to achieve implementation of the vision, provides the bulk of the chapter. Given the participatory nature of Woodsboro's visioning process, the chapter concludes with a section on public participation in the plan update.

Community Vision & Implementation Goals

- Increase citizen awareness of, and participation in, planning and other related community issues and processes.
- Promote community involvement in the implementation of the comprehensive plan's action items.

Maryland's Twelve Visions

The State of Maryland offers twelve visions for growth and development as most recently stated in the 2009 Smart, Green and Growing Act. County and municipal governments are required to update their long-range plans to incorporate the visions and implement a set of goals, objectives and policies based on them. The twelve visions address the following:

Vision 1	Quality of life and sustainability
Vision 2	Public participation
Vision 3	Growth Areas
Vision 4	Community Design
Vision 5	Infrastructure
Vision 6	Transportation
Vision 7	Housing
Vision 8	Economic Development
Vision 9	Environmental Protection

Vision 10	Resource Conservation
Vision 11	Stewardship
Vision 12	Plan Implementation

Frederick County's Vision

The Countywide Comprehensive Plan (1998) includes a vision statement for the county entitled, *Portrait of Frederick County: 2045*. This planning vision is the result of an extensive public participation process. There are seven themes to the portrait: self sustaining communities; dynamic business center; mixed-use growth; sensitive environmental areas; resource industries; rural/agricultural heritage; and stewardship of land and water. The portrait, in part, is inserted below.

In 2045, Frederick County will consist of thriving, self-sustaining communities, supported with funding adequate to maintain and enhance existing services. These communities will offer a mix of residential, commercial and employment uses, a full complement of public services and facilities, amenities, which support a high quality of life, and a design that is sensitive to the County's natural and cultural environment. Their design will maximize the preservation of open space and natural resources while discouraging an undue reliance on the automobile. Prudent public and private investment keeps these growth areas prosperous. Incentives are offered to provide greater community services and mitigate environmental impacts. Densities in most developed areas support mass transportation, van-pooling, or other alternative forms of transportation to reduce traffic.

In the 21st century, Frederick County will be a vibrant place to live, work, and play. It will be an example of the best in urban design and planning. A place where people are comfortable with their surroundings and which serves as a great stage for all forms of human activities.

Woodsboro's 1973 Guiding Principles

The framework for Woodsboro's 1973 plan was a broad based goal statement with five objectives to guide implementation of the goal. These five objectives set the stage for the main themes or chapters of the Plan – Land Use; Community Facilities and Services; Recreation; Transportation; and Economy. The objectives are expanded on in the various chapters of the Plan and include action items and in some cases specific information on who is responsible for completion of the task.

Woodsboro should seek to develop those aspects, which will create a community that is attractive as a place to live, work and play; a community with a high standard of living, having an atmosphere stimulating to thoughtful, creative and enjoyable pursuits.

To achieve this goal the following objectives must be reached and principles adhered to:

- To coordinate living areas, working areas, and leisure-time areas and provide for balanced community development.
- To plan for various public services and facilities which will meet the expressed needs of the community.
- To provide recreational facilities which meet the needs of the community and be easily accessible from all residential areas and schools.
- To plan for streets and highways to serve both the community and region and to coordinate circulation with land uses.
- To encourage the upgrading and success of the business community and to capitalize on the historic nature of the Woodsboro community.

Woodsboro's 2027 Vision Statement

The following community vision statement is intended to serve as the guiding principle for the Woodsboro Comprehensive Plan. The future decisions and activities that take place in Woodsboro will be consistent with the vision statement. The community as a whole, including residents, business owners, and town officials, are responsible for taking the necessary steps to make this vision attainable.

We envision that in 2027 Woodsboro will be:

- A safe haven for its residents;
- A quaint, rural village with tree lined streets and neighborhoods connected by sidewalks, pathways and the existing street grid;
- Identifiable and distinct from other communities, with gateways that reflect the character of the town;
- Proud of its historic preservation efforts concentrated around Main Street and associated beautification and economic development efforts;
- Comprised of people with diverse interests that take pride in maintaining and improving their homes and businesses;
- A multi-generational and family friendly community where residents can safely and easily access schools, parks, and gathering places;
- Supportive of its locally owned and small businesses, which provide citizens with essential services within close proximity to their homes;
- An active community where a wide variety of social, recreational, and community-sponsored activities take place and residents embrace a shared community spirit; and
- Managed by an accountable and accessible town government, which provide for the efficient and adequate delivery of services and infrastructure.

Woodsboro's Comprehensive Plan Goals

To achieve the shared twenty-year community vision for Woodsboro, a set of goals were developed to guide implementation. The goal statements correlate with the chapters of the plan. Objectives and action items to achieve implementation of the goals are provided in the associated chapters. These goals are specific to Woodsboro and shall be achieved by the community as a

whole. The 20-Year Comprehensive Plan goals of the Town of Woodsboro are:

Community Vision & Implementation

- Increase citizen awareness of, and participation in, planning and other related community issues and processes.
- Promote community involvement in the implementation of the comprehensive plan's action items.

Environmental Resources

- Demonstrate conservation and sustainable use of environmental resources.
- Continue to protect ecologically sensitive areas and wellhead protection areas.

Cultural Heritage

- Increase participation in programs promoting Woodsboro's cultural heritage.
- Protect and promote Woodsboro's historic charm by improving the condition and care of structures in its historic core.

Transportation

- Provide safe and consistent pathways and sidewalks for residents, business owners, and visitors of Woodsboro, which promote interconnected neighborhoods and offer social and recreational opportunities.
- Provide a reliable network of streets and alleys that are regularly maintained, repaired, and improved.

Community Services and Facilities

- Provide more than adequate services and infrastructure for the current and future projected population.
- Maintain the existing parkland and associated facilities and provide additional recreational facilities to meet the needs of a growing population.
- Improve public safety and security in the Town of Woodsboro.

Municipal Growth

- Manage the rate of growth to be consistent with the provision of adequate services and infrastructure.
- Continue to coordinate annexation plans and comprehensive planning efforts with Frederick County government.

Land Use

- Concentrate compatible, mixed-use development along the north and south ends of the Main Street corridor.
- Provide a mix of housing types supporting a multi-generational community.
- Continue to encourage small, locally owned businesses in Woodsboro with a focus on the existing Central Business District.
- Provide identifiable and distinct gateway entrances to the community from the three MD 194 intersections.

- Provide an accessible and viable Industrial Park that is integrated with the community and adjacent land uses.
- Promote the Town's land use plan and vision to the general public.

Plan Structure

Woodsboro Plan Chapter	State Mandated Element
Environmental Resources	Sensitive Areas Element
	Mineral Resources Element
Water Resources	Water Resources Element
Cultural Heritage	
Transportation	Transportation Element
Community Facilities	Community Facilities Element
Municipal Growth & Land Use	Municipal Growth Element
	Land Use Element

Public Participation

The Planning Commission began a review of the 1973 plan during their regular meetings in the fall of 2006. The Commission's meetings were open to the public and were advertised on the Town's web site. A citizen survey was distributed in January 2007 to solicit feedback from Woodsboro households. Additionally, the Planning Commission held a community brainstorming workshop in April 2007. The Planning Commission's draft plan was referred for a 60-day public review period in which public comments were sought. Following the review period, a public hearing was held. The public hearing offered citizens the opportunity to comment on the plan prior to its referral to the Town Council.

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Chapter 3

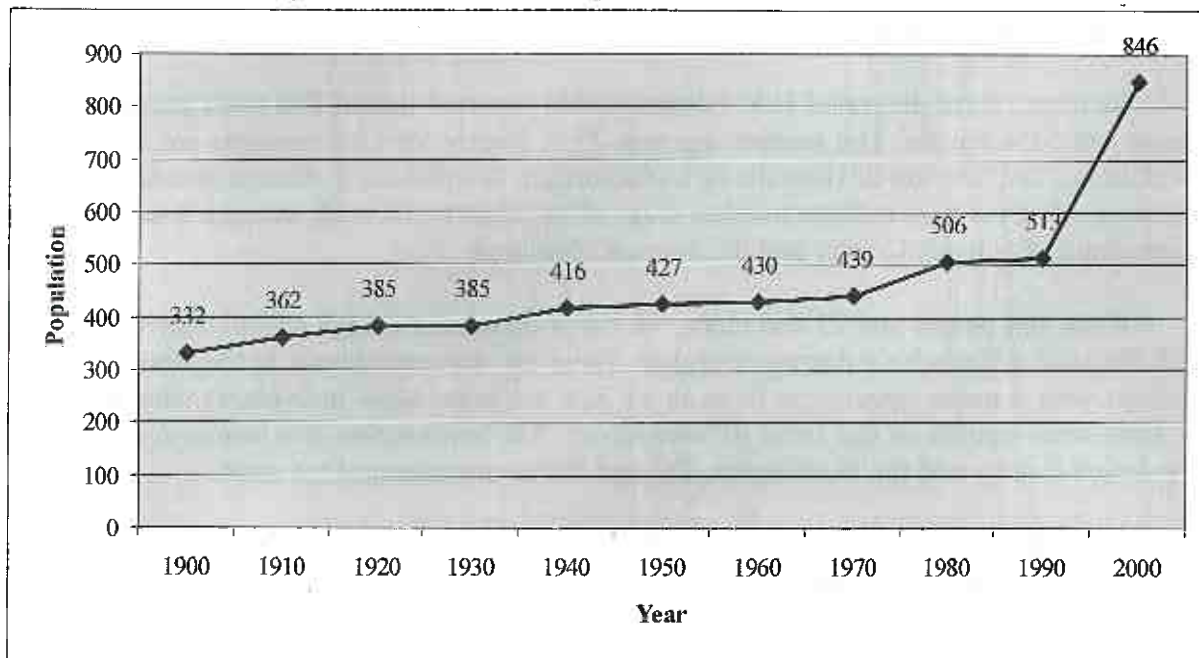
Background

This chapter presents background demographic and socio-economic data for the Town of Woodsboro. The 1990 and 2000 U.S. Census were the primary source for data. The chapter begins with a discussion of population growth, followed by a section on the characteristics of Woodsboro's population. The chapter concludes with a brief section on housing characteristics in Town.

Population Growth

Woodsboro has historically grown at a gradual pace (see Figure 3). From 1900 to 1990 the population increased by 181 persons for an average annual growth rate of less than 1% per year. Between 1990 and 2005, however, the population grew by 399 people for an average annual rate of 27 people. This rate more closely reflects the increasing rate of growth Countywide (see Table 1). While the Town of Woodsboro has experienced an increase in its population, one major residential development can have a significant impact on the annual growth rate given the small size of the Town. The U.S. Census estimated that the 2005 Woodsboro population was 912.

Figure 3: Woodsboro Population Trends, 1900-2000



**Table 1: Population Growth
Woodsboro and Frederick County
1900 - 2005**

Year	Woodsboro Population	Percent Increase	Frederick County Population	Percent Increase
1900	332	---	51,990	---
1910	362	9.0%	52,673	1.5%
1920	385	6.4%	52,541	-0.3%
1930	385	0.0%	54,440	3.6%
1940	416	8.1%	57,312	5.3%
1950	427	2.6%	62,287	8.7%
1960	430	0.7%	71,930	15.5%
1970	439	2.1%	84,927	18.1%
1980	506	15.3%	114,792	35.2%
1990	513	1.4%	150,208	30.9%
2000	846	65%	195,277	30%
2005	912	7.8%	220,701	13%

Source: U.S. Census Web Site <http://www.census.gov> and Frederick County Statistical Abstract (1978 edition).

It is not expected that Woodsboro will continue to experience the current growth rate over the long term. The Town does not have large areas of vacant land available for residential development. Those properties that do develop will most likely cause the population growth rate to rise and fall between the approval and construction processes. Periods of inactivity are expected between development projects. This scenario makes it more difficult to project a growth rate over a 10-20 year period.

Population Characteristics

The most recent decennial U.S. Census (2000) reported that of 846 town residents, 49% are male and 51% female. The median age was 35.6. Nearly 99% of residents are white, with 0.9% claiming that they are of Hispanic or Latino origin. Woodsboro's average household size is 3.1 persons, which is high relative to other areas of the County. Overall, average household size is decreasing in Frederick County and the State of Maryland.

Of the 464 people age 25 and older, 90.9% of them have a high school degree or higher and 38.6% hold a Bachelor's degree or higher. There are 401 individuals in the labor force (16 and older) with a mean travel time to work of 32.6 minutes. Most individuals who are in the labor force work outside of the Town of Woodsboro. The town serves as a bedroom community for Frederick County and the Washington, DC and Baltimore metropolitan areas.

The median household income in 1999 was \$65,000. The largest number of households in Woodsboro had an annual income between \$60,000 and \$74,999 and \$75,000 and \$99,999 (see Table 2). This income range is consistent with Frederick County households.

Table 2: Household Income Town of Woodsboro and Frederick County		
Income Range	Town of Woodsboro # of Households	Frederick County # of Households
Less than \$10,000	3	2,754
\$10,000 - \$19,999	13	4,981
\$20,000 - \$29,999	14	5,788
\$30,000 - \$39,999	24	7,105
\$40,000 - \$49,999	31	7,522
\$50,000 - \$59,999	27	6,680
\$60,000 - \$74,999	37	10,135
\$75,000 - \$99,999	36	11,846
\$100,000 - \$124,999	32	6,453
\$125,000 - \$149,999	12	3,042
\$150,000 - \$199,999	14	2,253
\$200,000 or more	5	1,556
Total	248	70,115
Source: U.S. Census (2000)		

Housing Characteristics

The Town of Woodsboro has a housing base of historic homes intermixed with homes predominantly built over the past twenty years (see Table 3). Of 298 housing units, 81 were constructed prior to 1959. Since 1990, 174 homes were constructed in Woodsboro; this accounts for more than one-half of the entire housing stock in Town.

Table 3: Year Structure Built Town of Woodsboro	
Year Structure Built	Housing Units
1999 – March 2000	10
1995 – 1998	81
1990 – 1994	83
1980 – 1989	20
1970 – 1979	9
1960 – 1969	14
1950 – 1959	20
1940 – 1949	5
1939 or earlier	56
Total	298
Source: U.S. Census (2000)	

According to the Census, single-family homes in Woodsboro had a median value of \$183,700 in 1999. In 2000, 84.6% of Woodsboro residents owned their home. Owner-occupied housing units increased in number by 82% from 1990 to 2000 (see Table 4). Rental units on the other hand, decreased in number by 47%.

Table 4: Occupancy by Type of Tenant Town of Woodsboro 1990 & 2000					
Occupant	1990		2000		Percent Change (%)
	Units	%	Units	%	
Owner	135	66	245	82	82
Renter	66	32	35	12	-47
Vacant	5	2	18	6	260
Total	206	100	298	100	45
Source: U.S. Census					

Chapter 4

Environmental Resources

The sustainability of a community is directly tied to the health of its environmental resources. Safe drinking water, clean air, and fertile, stable soils are basic necessities to human existence; however, their availability in the future is not certain. To ensure that our communities remain dynamic and productive requires a comprehensive understanding of its environmental resources as a basic consideration in its long range planning efforts.

The following chapter is arranged in five sections; the first presents the goals for environmental resource planning in Woodsboro. This is followed by a description of the Sensitive Areas Element requirement from the State Planning Act. The third section describes Woodsboro's physical environment and its implications for future land use. Then the area's diverse ecological environment is presented. Finally, the chapter concludes with a section on land preservation efforts, covering agricultural and related land protection in and around Woodsboro.

Environmental Resource Goals

- Demonstrate conservation and sustainable use of environmental resources.
- Continue to protect ecologically sensitive areas and wellhead protection areas.

Sensitive Areas Protection

The State's Planning Act of 1992 established a requirement for comprehensive plans to include a Sensitive Areas Element. Now referenced in Section 1.00(j) of Article 66B, the sensitive areas element should contain a jurisdiction's goals, policies, and standards for protecting areas from the adverse effects of development. Sensitive areas that should be protected include:

- Streams, wetlands and their buffers
- 100-year floodplains
- Habitats of threatened and endangered species
- Steep slopes
- Agricultural and forest lands intended for resource protection or conservation

Frederick County's Comprehensive Plan (1998) and the Walkersville Region Plan (2006) address the protection of an additional six sensitive areas elements. They include: the Monocacy Scenic River; prime agricultural soils outside of planned community growth boundaries; groundwater resources, particularly with regard to wellhead protection areas; wetlands; limestone conglomerate/carbonate rock areas; and historic and archeological resources. These

designations provide a framework for the long-term planning and protection of environmental and cultural resources throughout the County. The Sensitive Areas Element requirement is met with this chapter.

Physical Environment

An analysis of Woodsboro's physical geography provides valuable information on the potential of the land for different uses. These characteristics are permanent and generally cannot be altered except with great difficulty and expense. The physical environment to be described in this section includes the following elements: topography and steep slopes; geology and mineral resources; soils; surface water resources; and groundwater.

Topography and Steep Slopes

The Town of Woodsboro is located at the western edge of the Piedmont Plateau Province. The Piedmont, which literally means "to the feet of the mountains", is the plateau region of the eastern United States situated between the Atlantic Coastal Plain and the eastern mountain ranges.¹ Catoclin Mountain, which runs parallel to US Route 15 west of Woodsboro, forms the eastern boundary of the Blue Ridge Province. Generally, the Piedmont "is characterized by relatively low, rolling hills with heights above sea level between 200 feet (50 m) and 800 feet to 1000 feet (250 m to 300 m)."

Woodsboro, situated at the northern tip of the Glade Valley, lies between two ridgelines in a narrow continuation of the valley. Laurel Hill, a north-south ridgeline, defines the eastern boundary and an unnamed western ridge, also with a north-south alignment, forms the western extent of the valley and is the corporate boundary of the Town on the west side. Slopes within the corporate limits are as much as 15-20% along the west ridge, limiting the land capabilities for development or streets.

The topography of an area dictates the appropriate density, direction, and type of future land uses on a site. Steep slopes, in particular, pose a challenge or barrier to commercial and industrial development, which typically requires a level landscape for the construction of large buildings, parking lots and loading areas. On the other hand, a residential project may be able to use slope to its advantage. A smaller building footprint coupled with creative design could result in a project that is aesthetically pleasing and complementary to the environment.

Currently, the Town regulates steep slope activity by requiring that topography be mapped on preliminary plans. The County, which performs limited development review functions and issues building permits for Woodsboro, prohibits structures from being located in areas with slopes of 25% or greater.

Geology and Mineral Resources

According to the Maryland Geological Survey (2007), the Piedmont is composed of a

¹ <http://www.wikipedia.org>, 2007.

complex geology including hard, crystalline igneous and metamorphic rocks.² The Glade Valley consists predominantly of Frederick limestone (a thin bedded, dark blue limestone with dark, irregular clay partings) and Grove limestone (a thick bedded, fine grained, light to dark gray limestone). Grove Limestone underlies the western side of Woodsboro and Frederick Limestone underlies the east. An intrusive dike, a body of igneous rock crystallized from molten magma, runs in a north-south direction through the center of town. The composition of the north-south ridge just east of Woodsboro is a mixture of Antietam quartzite and shale.³

Mineral extraction is an economic activity dependent on location of the resource. Rock type and structure influences landforms and surface drainage patterns as well as groundwater availability. For these reasons and others, geologic information is fundamental to the selection of the best use that can be made of a land area.

The quality of both the Grove and Frederick limestone is very high. Both are quarried locally. Two companies produce industrial and agricultural lime, crushed stone, and lightweight aggregate in the Woodsboro vicinity.

Soils

The predominant formation in the Woodsboro area, Grove limestone, produces relatively shallow, fertile soils with corresponding bedrock that is extremely stable and solid. Frederick limestone produces deeper soils with less bedrock stability due to a greater possibility of cavities occurring within the bedrock. Historic reports of well driller logs in and near Woodsboro confirmed that soil depth to the Grove limestone bedrock is very shallow. The reports from the original Woodsboro Town Well in 1953 describe a soil depth of four (4) feet.

Generally, development in Woodsboro is non-restricted by soil type. Areas within the Israel Creek floodplain exhibit floodplain or wet soils.

Surface Water Resources

The Monocacy River, located just west of the Town of Woodsboro, is the largest tributary to the Potomac River, which ultimately meets the Chesapeake Bay. The river's headwater streams are Marsh Creek and Rock Creek, which converge at the Mason-Dixon Line. Other surface water resources in Woodsboro are Israel Creek, which runs north/south just east of MD Route 194 through the Woodsboro Community Park. The headwaters of Glade Creek are located west of MD Route 194 in the area of the Glade Valley Golf Club. Both Israel and Glade Creek drain directly in to the Monocacy River.

In the Woodsboro area, river and stream banks are not steep and water is relatively slow flowing over flat land. Surface storm drainage flows south and southwest to the Monocacy. Presently, no surface water is used for public water supply or storage. The potential for public use exists at Israel Creek because of its proximity to Town and its size. A map detailing stream

² <http://www.mgs.md.gov/esic/brochures/mdgeology.html>, 2007.

³ State of Maryland. The Physical Features of Carroll and Frederick Counties. Department of Geology, Mines and Water Resources. 1946.

corridors and floodplains is located in the Ecological Environment section.

Groundwater Resources

Groundwater is found below the surface of the land, moving through rocks and soil toward discharge in a stream, spring or other water body. The quality and quantity of groundwater are of significant concern in areas where surface water is not available for public supply. In these areas, the potential for development may be limited, given the availability of groundwater resources.

The Woodsboro area boasts productive limestone aquifers, classified in the U.S. Geological Society's Hydrologic Unit I. Average well yields in the Frederick and Grove Limestone areas (and other rock formations in Hydrologic Unit I) are expected to be 25 gallons per minute with a 74% chance of obtaining a yield of 10 gallons per minute or more.

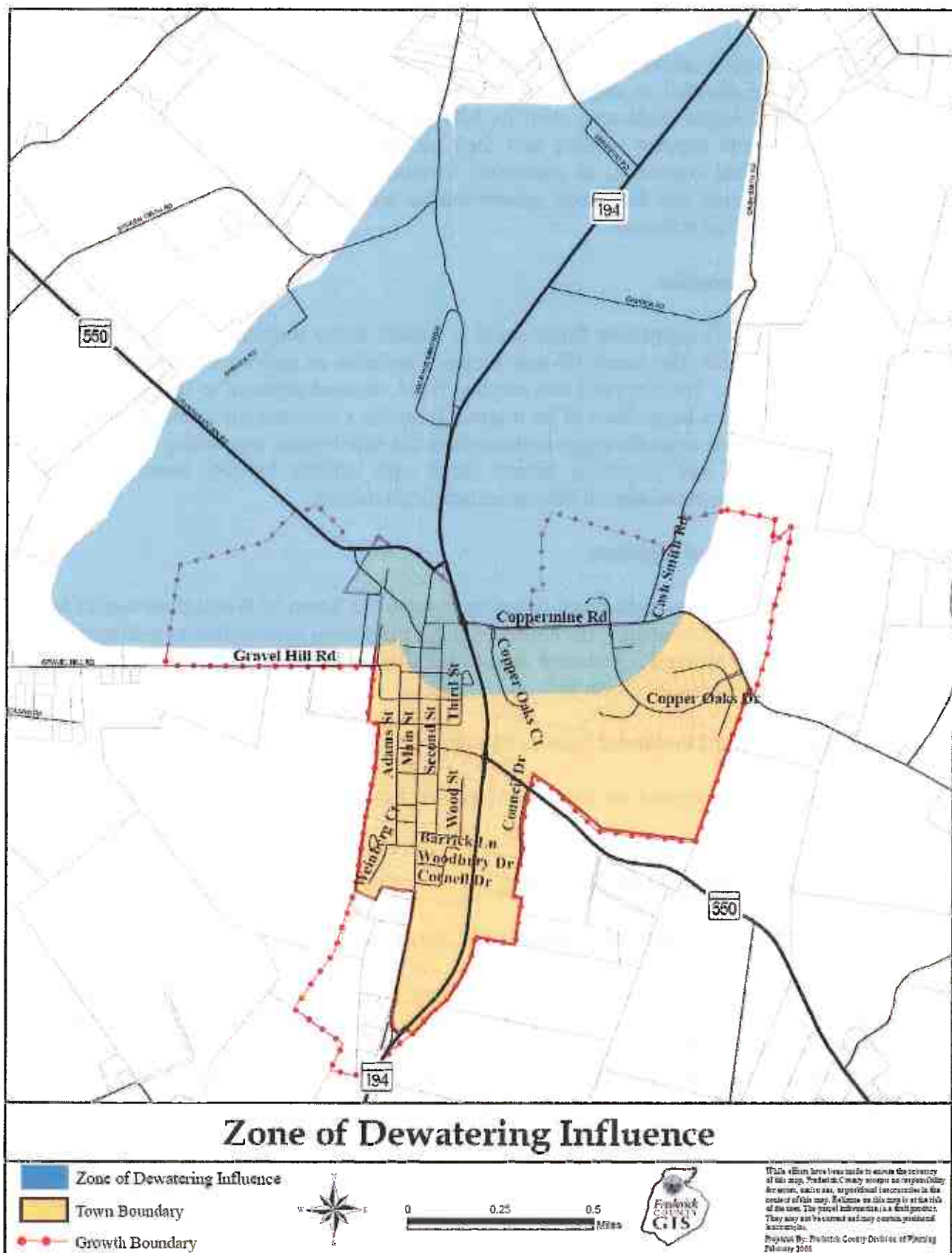
The town relies on wells for its community water system. The town's Well No. 1 obtains water from Grove Limestone, but all remaining wells draw from Frederick limestone. Despite their high productivity, both the Frederick and Grove formations are water table carbonate rock aquifers, which are susceptible to contamination. The Maryland Department of the Environment (MDE) performed a Source Water Assessment (SWA) in 1997 to establish a Wellhead Protection Area around the town's well sites. A Wellhead Protection Area (WPA) is the area around the town's wells in which any contaminant present could ultimately reach the well.

The results of their study produced a WPA and identified potential sources and types of contamination for each well. The assessment focused on potential contamination issues and did not address groundwater recharge. Examples of potential contamination sources were quarries, underground storage tanks, and the Town's Wastewater Treatment Plant. The assessment also listed recommendations to the town to ensure future water quality and quantity. Examples of recommendations include: form a local planning team; public awareness and outreach; develop a local wellhead protection ordinance; monitoring; and purchase/preserve land around the town's wells.

Zone of Dewatering Influence

The Maryland Department of the Environment (MDE) established a zone of dewatering influence around the Barrick and LeGore quarries north of the Town of Woodsboro. The extent of the zone of dewatering influence is based on topography, watershed boundaries, geologic factors, including the occurrence of natural fractures, lineaments, igneous dikes, and changes in rock type and variations in the water bearing characteristics of the underlying geology.

Mining operations are required to repair sinkholes within the zone if MDE determines it resulted from quarry dewatering. They are required to replace a water supply (i.e. private well) that fails due to declining water levels caused by mining operations. If the damage cannot be repaired, the company is responsible for compensating the landowner. Remedies provided by the mining companies apply to improvements made prior to the effective date of issuance of the zone. Woodsboro's zone was issued in the late 1990s.



Ecological Environment

With information about the proximity and extent of ecological resources, planned development can be directed to more appropriate areas. While the Town of Woodsboro is predominantly a developed landscape, even its built environment has the capacity to provide ecological function and support wildlife and their habitats. The following section describes Woodsboro's ecological resources; in particular, forests and vegetation; stream buffers and corridors; and endangered and threatened species habitat are highlighted. A map of forests and floodplains is included for reference.

Forests and Vegetation

Woodsboro's only significant forest stand is located at the southeast corner of the town parklands off of MD 550. The nearly 90-acre property includes an active recreation area and a segment of Israel Creek. The Copper Oaks neighborhood, situated adjacent to the parklands on the north end, protected a large share of its original forest as a requirement in the development process. Mature trees and vegetation appear throughout the subdivision, supporting sediment and erosion control efforts and providing natural shade and wildlife habitat. Street trees and landscaping dominate the remainder of this agricultural community.

Stream Buffers and Corridors

Israel Creek runs in a north-south direction through the Town of Woodsboro east of MD 194. Within the municipal boundary, the entire length of the stream is identified as parkland. The northern segment runs through a protected area of the Copper Oaks development; the southern end of the stream lies within the Town Park.

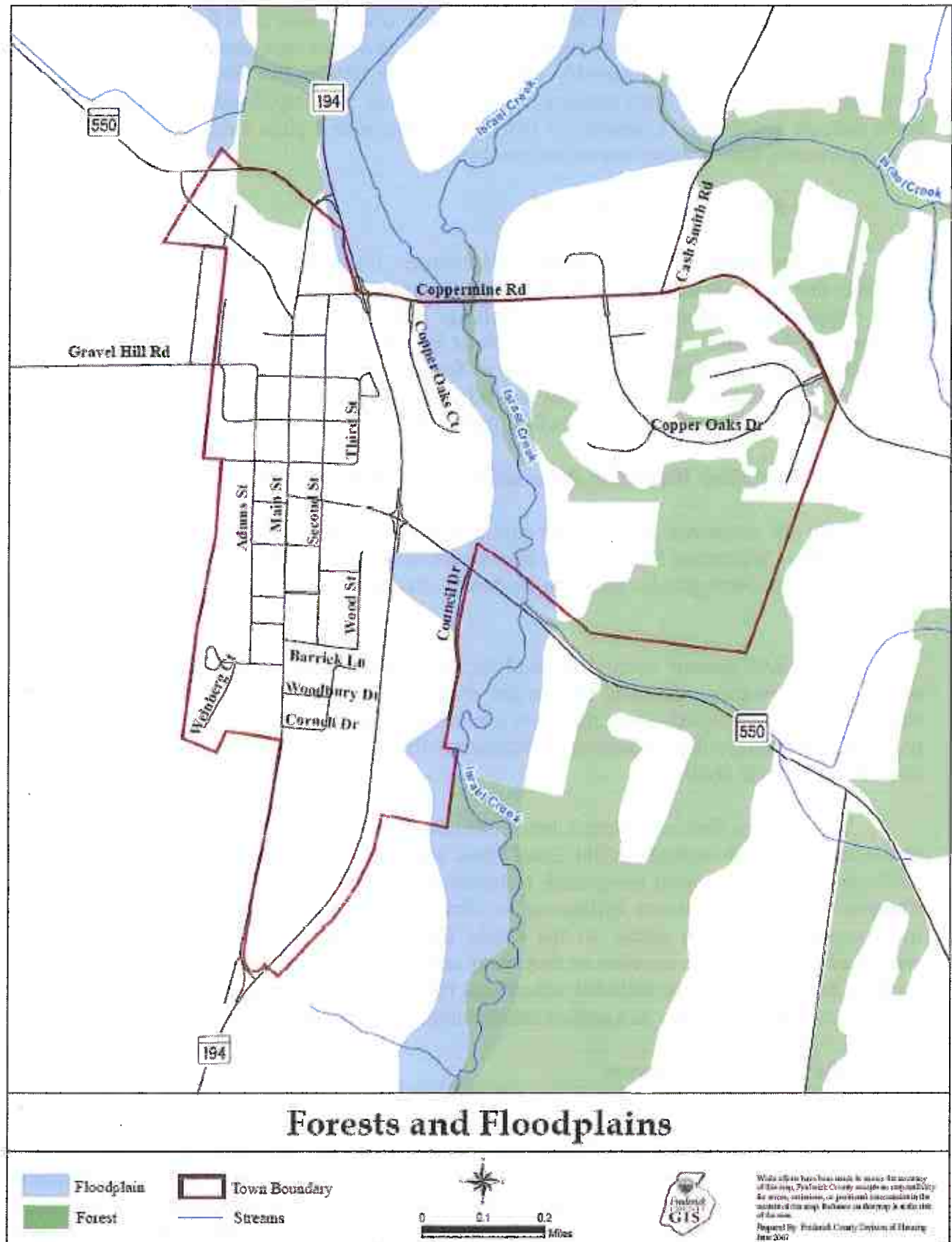
Endangered and Threatened Species Habitat

There is no endangered or threatened species habitat identified within the Town of Woodsboro.

Environmental Policy and Planning

House Bill 786 – Stormwater Management Act of 2007

Conversion of land for the development process alters the hydrologic cycle and impacts watershed health. After trees are cut and land is cleared for the construction process, buildings and infrastructure are developed. Rooftops, sidewalks, roads, driveways, and even grass-covered yards are considered impervious surfaces, when compared to the vegetated, undeveloped landscape that they have replaced. In an urban/suburban environment, when rain falls, it runs off of impervious surfaces, gaining heat and picking up oils, fertilizers, sediments, and other pollutants that are transferred to local waterways through curb and gutter systems, enclosed storm sewers, and lined channels. This polluted discharge affects water quality and the health of aquatic life downstream.



Currently, developers are subject to stormwater management laws that require sediment fencing, construction of stormwater management ponds, and other best management practices. In 2007, the Maryland General Assembly passed legislation (House Bill 786), which will ensure developers control runoff from construction sites and use low impact development design to better manage stormwater. Examples of practices include native plant landscaping, minimizing land disturbance, and reducing impervious surfaces.

House Bill 1141 – Water Resources

The new Water Resources Element requirement for comprehensive plans in Maryland mandates that local jurisdictions link their land use plan with plans for provision of drinking water supply and quality, wastewater discharge and treatment capacity, and stormwater management. Frederick County adopted its Water Resources Element as part of its countywide Comprehensive Plan in April 2010. The Town of Woodsboro has worked closely with the County to provide current data on growth plans and infrastructure capacity and has developed its own Water Resources Element as part of this Comprehensive Plan document (Chapter 9).

Monocacy River Watershed Restoration Action Strategies (WRAS)

With the assistance of a diverse group of partners, the Frederick County Division of Public Works - Watershed Management Section developed a watershed restoration plan for the Monocacy River. Strategies for restoring the health of Israel Creek and Glade Creek are included in these plans.

The WRAS concept is an element of the Clean Water Action Plan, a federal initiative to guide states in renewed efforts to restore and protect their water resources. With support from state agencies, local stakeholders met over a multi-year period to identify the causes of water pollution and resource degradation in the Monocacy River watershed and provide specific action items to address the problems.

This was the first coordinated data collection and interpretation effort for the Monocacy watershed and its sub-watersheds like Israel Creek and Glade Creek. In addition to prompting the publication of much-needed benchmark technical reports, the WRAS initiated the Monocacy-Catoctin Watershed Alliance (Alliance), a citizen based stakeholder group charged with implementing the action items. In the Glade Creek watershed, the Alliance has installed watershed signs that alert travelers as they enter and exit the Glade Creek watershed area. Other projects in the region have included schoolyard habitat restoration projects, stream buffer tree plantings, wetland mapping, rain garden construction, and various clean-up efforts.

The Green Print Program

The Green Print Program was established by the State of Maryland in 2001 to identify and protect green infrastructure hubs and links throughout the state. The state's green infrastructure includes ecologically significant areas such as wetlands, river and stream systems, contiguous forests, and ridgelines. Green Print is intended to build on other existing conservation programs such as Rural Legacy and agricultural land preservation. Green Print has identified the

nearby Monocacy River as a Green Link and an area of contiguous woodlands in the vicinity of LeGore Bridge as a Green Hub. There are no sites identified within the Town of Woodsboro.

Land Preservation

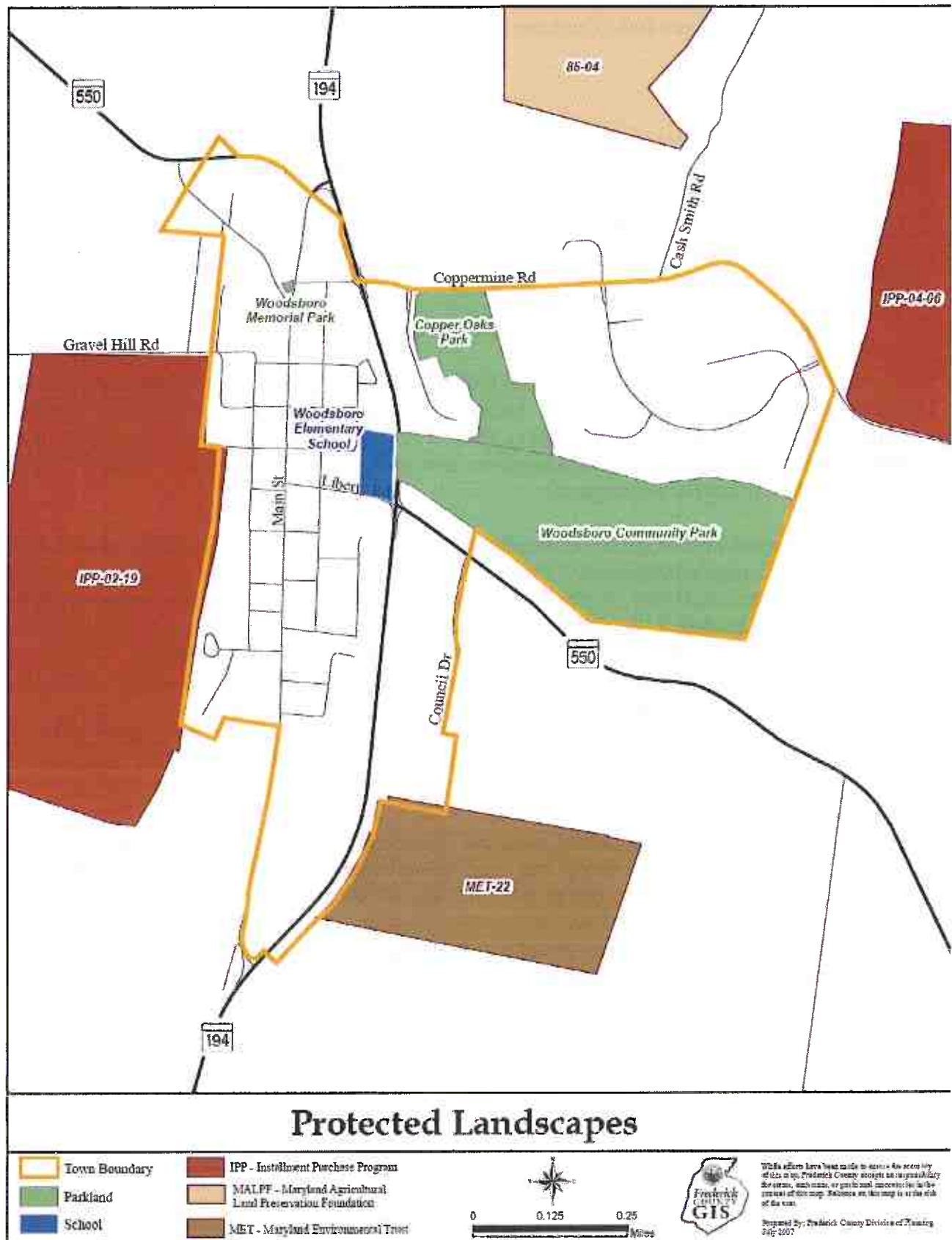
The Town of Woodsboro is bordered by several properties in state and local land preservation programs. These programs aim to permanently protect land from development. Landowners sell the development rights to their landholdings; they often continue to reside on the property either farming the land or continuing another rural land use. A description of the various programs as well as information on Woodsboro area properties in permanent protection follows.

State and County Land Preservation Programs

Together the State of Maryland and Frederick County governments support a diverse land preservation program. State-sponsored initiatives include the Rural Legacy Program, Maryland Agricultural Land Preservation Program (MALPF) and the Maryland Environmental Trust (MET). Frederick County offers landowners two options, the Installment Purchase Program (IPP) and the Critical Farms Program.

The largest farm in preservation adjacent to Woodsboro is the 219-acre Hildebrand Farm, placed in the County's Installment Purchase Program in 2003. This property comprises most of Woodsboro's western border. North of town are several protected properties contiguous to one another; along Grubber Road and Cash Smith Road are the Encarnacao property (136 acres, MALPF Easement, 1987), Doody property (93 acres, MALPF Easement, 2001), and Angleberger property (68 acres, IPP, 2004). Further south, in 2004 the Drenning's placed 106 acres of farmland along Coppermine Road in the IPP. South of town limits along Route 194 are the 61.39-acre Lewis Farm (MET Easement, 2002) and 129 acre Merkle property (MALPF Easement, 1998). A map of protected properties in and around Woodsboro is included on the following page.

Properties in the Woodsboro area and Walkersville Region generally rank high in the application process for agricultural and land preservation programs. Soil type, development pressure, and the size of the parcel are elements of the ranking. In 2007, three additional properties applied for state and local preservation programs in the Woodsboro area. They include the Poffenberger's on Coppermine Road, the Miller's on Gravel Hill Road, and the Gruber's on Cash Smith Road. These applications are under review; offers will be made to the highest-ranking property owners in the springtime.



Environmental Resources Goals, Objectives and Action Items

Goal 1: To demonstrate conservation and sustainable use of environmental resources.

Objective 1: Expand residential and business oriented curbside recycling program in Woodsboro.

Action Item: Continue outreach to encourage participation in recycling.

Objective 2: Develop an outreach program to residents encouraging water conservation and educating them about the impacts of their consumption.

Goal 2: To continue to protect ecologically sensitive and wellhead protection areas.

Objective 1: Permanently preserve the Town's well fields and recharge areas from contamination and over-withdrawal.

Action Item: Identify the areas needed to serve the 20-year municipal growth area and map them accordingly to overlay with the Town's land use plan.

Objective 2: Investigate other possible water resource options and develop a long-term plan to meet or exceed anticipated future water needs within the Town.

Objective 3: Identify properties eligible for land preservation that would link permanently protected farmland, parkland, and the Israel Creek floodplain in and around the Town of Woodsboro.

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Chapter 5

Cultural Heritage

A wealth of cultural features and sites are situated within the municipal limits of Woodsboro and contribute significantly to community identity, character, and sense of place. This chapter reflects on Woodsboro's unique history and offers recommendations for historic preservation and education efforts.

Cultural Heritage Goals

- Increase participation in programs promoting Woodsboro's cultural heritage.
- Protect and promote Woodsboro's historic charm by improving the condition and care of structures in its historic core.

Cultural Heritage

Primarily German immigrants settled this portion of Frederick County in the mid 1700s; however, it was an Englishman, Joseph Wood Jr., who developed the original town plan in 1786 then referred to as Wood's Town. Wood's Town "consisted of eight lots, each 247 feet by 66 feet, and Frederick, Second, Third, and Elizabeth were the principal streets," according to historian Lawrence Dorsey, Jr.

Woodsboro developed as a typical crossroads town along what was initially an Indian trail heading west to the mountains; it was later developed as the Monocacy Road. The north-south link created by the Woodsboro and Frederick turnpike made Woodsboro a popular stagecoach stop. Additional improvements to the transportation facilities came in the 1870s with the construction of the Frederick and Pennsylvania Railroad, which connected with the City of Frederick to the south and the Town of Hanover, Pennsylvania, to the north.

While primarily serving the agricultural community, Woodsboro supported a number of important businesses including hotels, the Glade Valley Mill, Woodsboro Livestock Sale, Woodsboro Savings Bank, the Rosebud Perfume Company, and three limestone quarries.

Mining History

Historically, the LeGore Lime Company quarry and plant was located on the west side of the Pennsylvania Railroad at LeGore adjacent to the smaller Barrick operation. Operations commenced in 1861 on approximately 200 acres. This quarry exhibits the most complete section of Grove limestone from white fine-grained limestone to marble and shaly dark limestone. Lime was sold principally to the agricultural trade. Crushed stone and agricultural limestone were also produced.

Samuel W. Barrick erected three pot kilns and sold lump lime by the bushel to local farmers at his S. W. Barrick and Sons quarry established in 1874. Later, the output of the quarry included both agricultural lime and crushed stone. The strike of the beds at Barrick quarry carries the white limestone under the limekilns toward the south limiting future expansion toward the north.

The most recently established quarry is the Lehigh Portland Cement Company located south of MD Route 550 east of Laurel Hill. This is geographically the largest quarry in the Woodsboro area. Shale was crushed and ground at the plant, which was equipped to manufacture all types of Portland cement. Operations ceased in 2007.

Recent Efforts

Historic Sites Inventory

In 1991, Frederick County initiated the Historic Sites Inventory project to identify historic sites throughout the County. Over a four-year period, 5,170 sites were identified, 1,742 of which are located in the Walkersville Planning Region. The Woodsboro Survey District was recognized based on the original town plan of 1786. The architectural and historical significance of residential, commercial and industrial buildings and sites of the original town plan are incorporated as well as those along old MD 550 to the northwest end of Main Street and from South Main Street to Barrick Lane. Table 5 indicates those properties in and around Woodsboro, Maryland that were identified as historic sites, eligible for the inventory.

Heart of the Civil War Heritage Area (HCWHA)

In August of 2006, the Town of Woodsboro signed a resolution to amend its comprehensive plan to incorporate the Heart of the Civil War Heritage Area Management Plan. The plan serves to promote heritage tourism and encourage awareness and education about the Civil War in Washington, Frederick and Carroll counties.

The Maryland Heritage Areas Program, a state program facilitating economic development through heritage tourism, certified the HCWHA as a Recognized Heritage Area; this designation is necessary in order to access state resources such as grants, loans and technical assistance. Grants of up to \$100,000 are available for non-capital projects that advance the goals of the HCWHA at a 50% match. Tax credits and low interest loans may also be available.

Prior to Woodsboro's participation, Frederick County incorporated the HCWHA amendment into the Countywide Comprehensive Plan. At present, all Frederick County municipalities excluding Walkersville have joined the program.

Table 5: Frederick County Inventory of Historic Properties List Woodsboro Area		
Inventory #	Name	Address
F-8-048	George F. Smith House	4 N Main Street
F-8-072	E. Gilbert House	110 Main Street
F-8-135	War Memorial	MD 550 & MD 194
F-8-150	Woodsboro Train Station	
F-8-073	G. P. Barrick House	2 S Second Street
F-8-074	Frees-Reifsnider House	2 N Main Street
F-8-007	Nothing Venture, Nothing Gett Farm	9731 Oak Hill Road
F-8-047	Nelson Trout House	11143 Dublin Road
F-8-049	LeGore Stone Arch Bridge	LeGore Bridge Road & Monocacy River
F-8-054	Woods Mill Farm	11210 Cash Smith Road
F-8-056	Stony Ridge	Creagerstown Road
F-8-057	Trout House	Creagerstown Road
F-8-058	Dorcus Dwelling	Woodsboro Pike
F-8-059	Quakers good will	
F-8-060	Myers House	10708 Woodsboro Pike
F-8-061	Woodsboro Historic District	Woodsboro Pike
F-8-062	LeGore Quarry Worker's Housing (demolished)	Good Husband Row
F-8-064	Geiselman House	305 N Main Street
F-8-065	Glade Valley Milling Company	100 Creagerstown Road
F-8-066	St. John's Reformed Church	Second Street
F-8-067	Stimmel House	111 N Main Street
F-8-068	Smith-Wickless House	Main Street
F-8-069	L. C. Powell House	301 S Main Street
F-8-070	Rosebud Building	6 N Main Street
F-8-071	Woodsboro Savings Bank	3-7 N Main Street
F-8-075	M. Beard House	10000 Pine Tree Road
F-8-076	Saltbox House	Pine Tree Road
F-8-077	Ernst-Duncan Farm	10102 Woodsboro Road
F-8-078	Elsie M. Beard House	10205 Woodsboro Road
F-8-079	Lucky Discovery House	10328b Woodsboro Road
F-8-080	Danner-Poffenbarger farm	10905 Coppermine Road
F-8-081	LeGore House	11638 Woodsboro Pike
F-8-084	Centerville Survey District	Coppermine Road
F-8-085	LeGore Quarry - LeGore Junction	11607-11619 LeGore Bridge Road
F-8-086	Barrick Lime Works Company Housing	9837-9852 Barrick Road
F-8-088	Rocky Hill Church	Coppermine Road
F-8-089	New Midway Consolidated School	12226 Woodsboro Pike
F-8-098	Mt. Zion Lutheran Church	Nicholson Road & Haughs Church Road
F-8-099	Oak Hill Survey District	Oak Hill Road & LeGore Bridge Road
F-8-100	Troutville Survey District	Oak Hill Road & Clyde Young Road
F-8-101	Creagerstown Road Survey District	11238-11342 Creagerstown Road
F-8-107	Dublin Road Lime Kiln	Dublin Road
F-8-139	Bridge #100095	Creagerstown Road Israel Creek Bridge
F-8-141	Spring Plains Mill House Property	10302 Coppermine Road

Cultural Heritage Goals, Objectives and Action Items

Goal 1: To increase participation in programs promoting Woodsboro's cultural heritage.

Objective 1: Better understand the federal, state and local programs available to Woodsboro.

Action Item: Invite the County Historic Preservation Planner and other local or regional experts to a meeting to discuss programs and available options.

Objective 2: Work with the Woodsboro Historical Society to develop an action plan for preservation activities in Woodsboro.

Goal 2: To protect and promote Woodsboro's historic charm by improving the condition and care of structures in its historic core.

Objective 1: Continue to implement Town-sponsored beautification projects, which instill a sense of pride and identity for the historic downtown.

Action Item: Solicit the assistance of volunteer organizations to achieve the above objective, as needed.

Objective 2: Develop a set of design guidelines for Woodsboro's neighborhood districts to preserve the Town's historic character.

Action Item: Pursue organizing a series of presentations or workshops with outside experts to assist the Town in developing design guidelines and standards.

Action Item: Investigate grant opportunities to cover the costs associated with the design guidelines workshops.

Objective 3: Encourage residents to pursue recognition of historic properties through local, county and state programs.

Action Item: The Woodsboro Historical Society will coordinate the acquisition of funding and resources to help finish the restoration of Woodsboro's Train Station.

Chapter 6

Transportation

This chapter presents the Town of Woodsboro's Transportation Plan. Woodsboro's street network, street classification, traffic volume data are described followed by sections on the railroad, transit opportunities and bicycle and pedestrian facilities. The chapter concludes with an outline of transportation priorities and action items.

Transportation Goals

- Provide safe and consistent pathways and sidewalks for residents, business owners and visitors of Woodsboro, which promote interconnected neighborhoods and offer social and recreational opportunities.
- Provide a reliable network of streets and alleys that are regularly maintained, repaired, and improved.

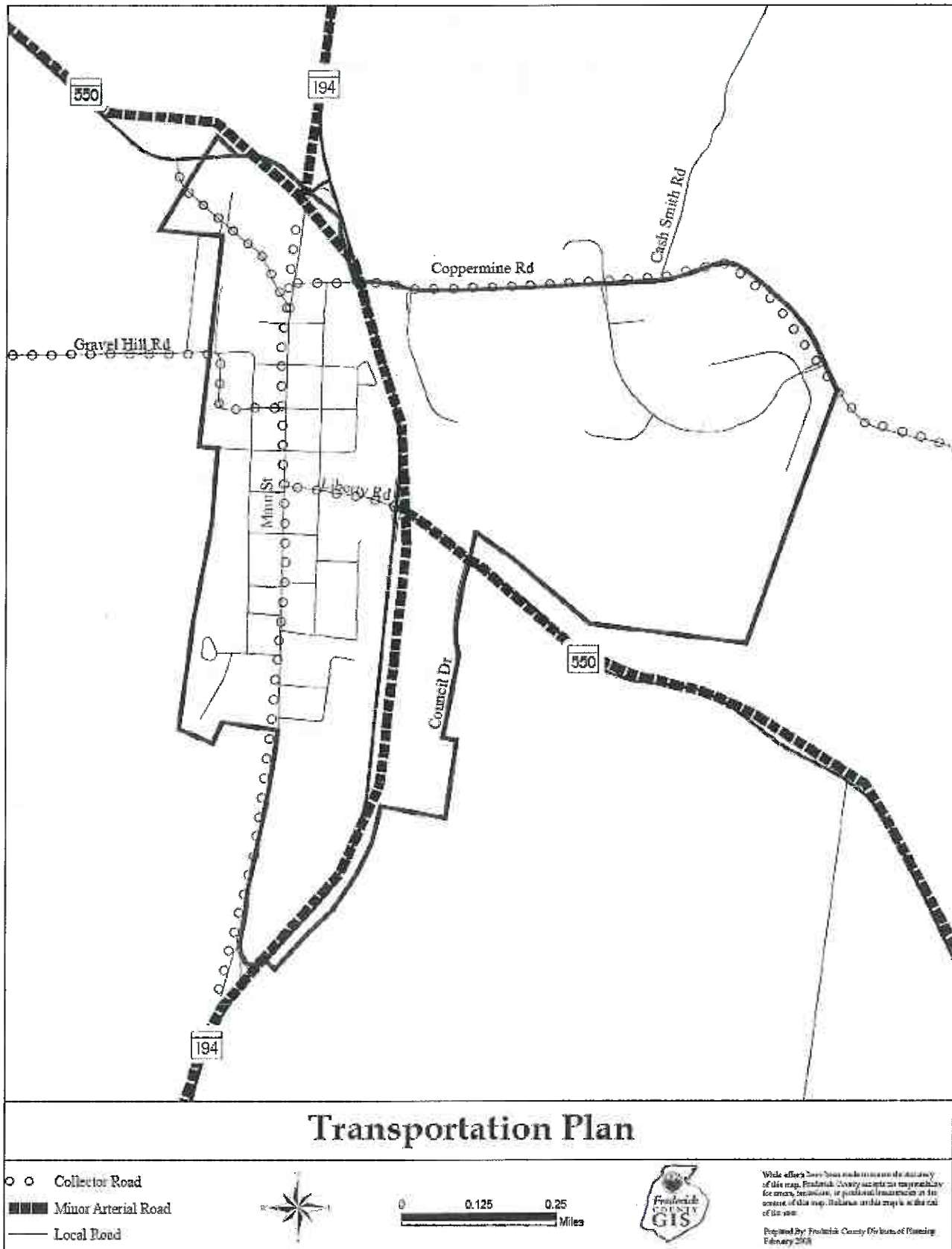
Street Network

Woodsboro was designed around a grid street pattern centered along the original MD 194, Main Street, which served as the primary north-south highway through this section of Frederick County. The street network has expanded two blocks east of Main Street, due to its flat topography and absence of streams or other limiting factors. To the west of Main Street, a steep ridgeline and the railroad kept expansion limited to one block. These north-south local streets are connected with Main Street by a series of alleys.

The Town has access to the regional arterial highway system via MD 194 and MD 550. The three quarries that surround Woodsboro utilize this network; the truck traffic generated by the quarries prompted town leaders to propose a bypass around the community as early as the 1950s. The bypass for MD 194 was opened for service in October 1996. Traffic using MD 194 or MD 550 can now completely bypass the Town. Prior to its construction, truck traffic passed directly through town on Main Street. A transportation plan map for Woodsboro is provided on the following page.

Street Classification

For planning purposes, street networks are described in terms of a hierarchy or classification. This classification describes how a street is used and designed and refers to the kind of traffic it carries. It also references whether the traffic is generated locally or that it is through traffic coming from an area outside of town. Finally, the amount of traffic that is



expected and the traffic speed influence a streets classification.

There are three primary classifications for streets within the Woodsboro network. They are: arterial, collector, and local. Arterial roads offer intra-county access between towns and the highway system. Examples of arterial roads in and around Woodsboro are MD 194 and MD 550. Collector roads collect traffic from residential neighborhoods via local streets and provide access to the arterial highways. An example of a collector road is Main Street, which provides access from the downtown area to MD 194 and 550. Others include Coppermine Road and the old sections of MD 550 at the north side of Town and at the Woodsboro Elementary School.

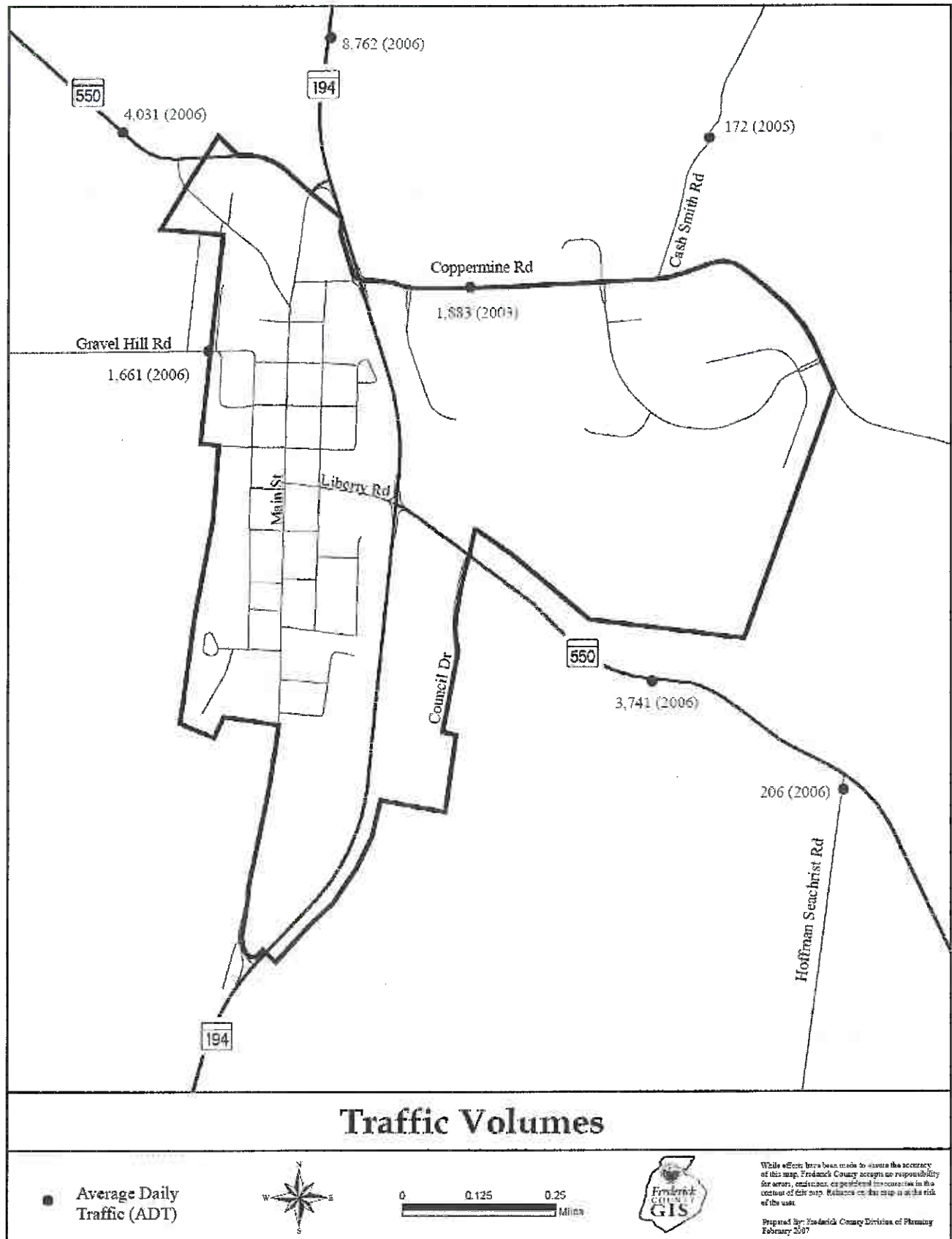
Finally, local streets provide access to homes and sometimes businesses. They cater to low levels of traffic at slow speeds (less than 25 mph). Woodsboro's alleys are also considered local streets. They provide multiple access points between streets helping to spread traffic evenly across town.

Traffic Volume

The Maryland Department of Transportation (MDOT) collects traffic count data known as Average Daily Traffic (ADT) for several roadways around the Town of Woodsboro. The traffic data is acquired over a 24-hour period from both directions. A review of the ADT for 1996 and 2006 on four roadways is provided below. Generally, traffic volume has increased over the past ten years. One segment of roadway had a decrease in traffic volume; MD 550 three-tenths of a mile north of the intersection with MD 194 decreased from 4,075 to 4,031 over the ten-year period (see Table 6).

Table 6: Average Daily Traffic Counts 1996 and 2007		
<i>Location</i>	<i>1996</i>	<i>2007</i>
MD 194 .10 mile south of Le Gore Bridge Road	6,875	8,762
MD 550 .5 mile south of MD 194	2,575	3,741
MD 550 .3 mile north of MD 194	4,075	4,031
Gravel Hill Road .1 mile west of Main Street	775	1,661
Source: Maryland State Highway Administration, 2007.		

Woodsboro experiences considerable heavy truck traffic as a result of local quarrying operations. The downtown area received relief from truck traffic with the construction of the bypass in 1996. Prior to the bypass construction, Main Street handled nearly 9,000 vehicles per day. The following map presents average daily traffic counts that were collected by Frederick County and the State of Maryland.



Railroad

In the 1870s, the Pennsylvania Central Railroad constructed a railroad to link the B&O Railroad in Frederick with lines in Pennsylvania. The railroad line runs through both Woodsboro and Walkersville and continues north to Taneytown in Carroll County. In 1972, Hurricane Agnes washed out the bridge connection between Walkersville and Frederick at the Monocacy River. The connection was not rebuilt until the early 1990s.

Maryland Midland Railway, a freight service provider, purchased the line between the Maryland/Pennsylvania border and North Glade Road from the State of Maryland in 2005. The line connects with their east/west main line, connecting Blue Ridge Summit/Highfield and Emory Grove/Reisterstown. The Walkersville Southern Railroad operates a weekend tourist train on the portion of the State (MD) owned line between Walkersville and a stop in the vicinity of where MD 355 dead-ends. The State owns the line from North Glade Road to Frederick and the Walkersville Southern leases their portion from the State. The State of Maryland opened the MARC line to Frederick in 2001. There are no long-range plans to extend commuter rail service over the Monocacy River to the Woodsboro or Walkersville areas.

Transit Service

TransIT Services of Frederick County operates paratransit service for senior citizens and people with disabilities throughout the County and public transit service concentrated around the City of Frederick. Shuttles connect riders to various growth areas and municipalities outside of this core service area. The closest service to Woodsboro is the Walkersville shuttle, which stops in the Discovery community and at the Walkers Village Shopping Center off MD 194. Service is available throughout the day and is timed to make connections with other bus and shuttle routes at the Transit Center in downtown Frederick. The Walkersville Meet the MARC Shuttle service operates during morning and evening commuter hours. The 2007 Transportation Development Plan recommends expanding the Walkersville Shuttle to provide hourly service throughout the weekday and on Saturdays.

Bicycle, Pedestrian & Other Multi-Use Facilities

Pedestrian Facilities

The compact nature of Woodsboro lends itself to easy pedestrian access throughout most of the Town. The grid street network provides pedestrians with direct connections on the west side of MD 194. The east side of MD 194 has potential for trail connections and improved sidewalks.

Destinations in Woodsboro, such as the grocery store, post office, elementary school, churches, and park are within easy walking distance for most residents. There are significant opportunities to make walking and bicycling legitimate alternatives to the automobile in making short trips around Town. This is especially important for the Town's youth population who otherwise rely on adults for transportation. Safe and accessible facilities would give youth the opportunity to develop a greater degree of independence. The health benefits of a decreased

auto-dependence could benefit many residents.

Sidewalks

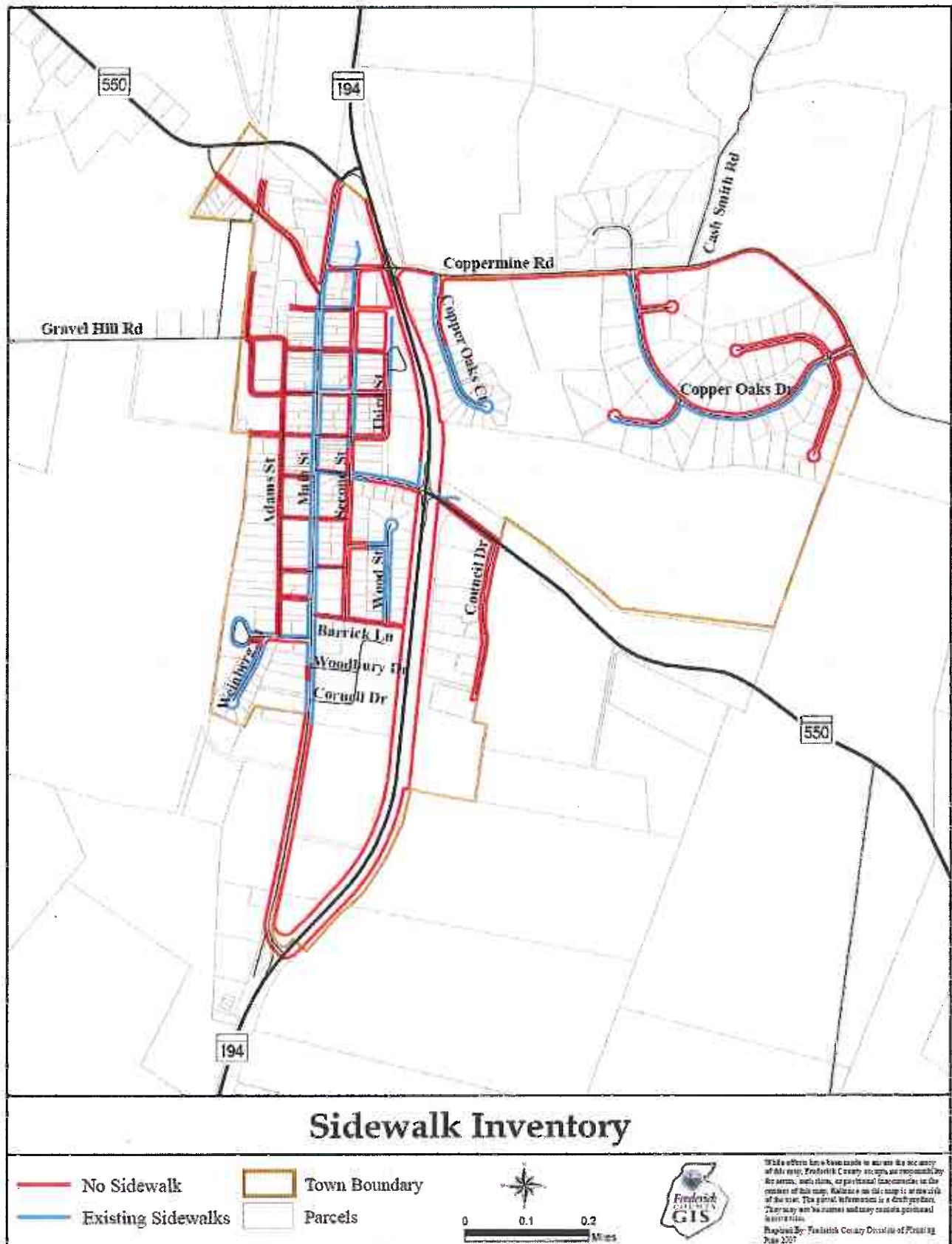
Currently, Main Street offers the most contiguous length of sidewalk in Woodsboro. Sidewalks begin at the Woodbury subdivision and continue north to the fork in the road at Old MD 550. A sidewalk continues north on the east side of Main Street to the gas station. There are several short sections of existing sidewalk located throughout Town that provide no continuity through the Town. Examples are along alleys off of Main Street or along side streets like Second Street, Wood Street and Third Street. There are no sidewalks on the extent of Adams Street; the roadway lacks the appropriate right of way for improvements.

Landowners are responsible for maintaining and improving sections of sidewalk located on their property. New sidewalk construction is required as part of the subdivision process, in most cases. Whenever new roads are proposed, curb, gutter and sidewalk improvements are mandated. The most recent major subdivision, Woodbury, is an example of the type of improvements currently required by the Town's regulations.

Sidewalk Inventory

The following table and map show sections of streets and alleys in Woodsboro where appropriate sidewalk infrastructure is not present (see Table 7). These areas would be appropriate for a sidewalk retrofit program or other improvement program. These areas should be prioritized for improvements in the future.

Table 7: Proposed Sidewalk Improvements List		
Street Name	Area of Concern	Observations
Liberty Road/MD 550	MD 194 intersection and interconnection with Main Street (west) and Town parkland (east)	Partial sidewalk in place; need connection to Town park and safety improvements for users
Second Street	Barrick Lane to School Street and Dorcus Alley to Coppermine Road	Several sections in place; need improvements along extent of roadway to connect the core of downtown
All Woodsboro alleys		Right of ways vary; few existing improvements; connect with side streets for better access
Third Street	School Alley to Dorsey Alley	Currently paved around Fire Dept.
Old MD 550 section	From Main Street to corporate limits	Connect with residential and commercial areas along roadway
Elizabeth Street/Gravel Hill Road corridor	West side	Connect with Southern States, American Legion and residential properties
Coppermine Road	South side between Main Street and Copper Oaks subdivision	Provide a connection for residents of Copper Oaks subdivisions to downtown; this is a County road
Copper Oaks Drive and side streets	Full extent, one side; cul-de-sacs	Low priority; one side of roadway has sidewalk improvements; three of four cul-de-sacs do not
Adams Street	Full extent of roadway	Right of way currently inadequate for improvements



Bicycle Facilities

No special accommodations or facilities (i.e. bike lanes, trail systems, parking areas) exist for bicycles in the Town of Woodsboro. The street network provides the best routes in and through the community. The amount and speed of traffic is low enough to allow cyclists safe travel within mixed traffic.

Two corridors in town have potential for inclusion in a multi-use trail system: the railroad corridor owned by Maryland Midland Railroad and the town's park property along Israel Creek. Both sites could provide off street bicycle and pedestrian facilities.

Frederick County Bikeways and Trails Plan

Frederick County adopted a Bikeways and Trails Plan (1999) that includes three alternate trail proposals for the Walkersville-Woodsboro corridor. The first is a 3.5-mile trail from Woodsboro to Walkersville along Israel Creek. This trail could be extended south through the Town of Walkersville to link with the Monocacy River. The second is a 1-mile trail along Glade Creek in Walkersville linking the Monocacy River to Fountain Rock Nature Park. The third is a rails-to-trails proposal, which would involve development of a multi-use trail along the existing railroad tracks from Frederick to Woodsboro.

Monocacy River Water Trail

With support from the Chesapeake Bay Gateways Network, Community Commons, a local nonprofit organization, developed the Monocacy River Water Trail. A detailed map and brochure along with wayside markers at various put-in locations are available for canoeists, kayakers and other river enthusiasts. The trail extends from MD 77 south to the Potomac River.

Transportation Plan Goals, Objectives and Action Items

Goal 1: To provide safe and consistent pathways and sidewalks for residents, business owners and visitors of Woodsboro, which promote interconnected neighborhoods and offer social and recreational opportunities.

Objective 1: Initiate a sidewalk improvements program, which identifies priorities, funding and a timeline for completion of local projects.

Action Item: The Planning and Zoning Commission will review the sidewalk gap inventory, prioritize future improvements, and present their program to the Town Board.

Action Item: The Planning and Zoning Commission will research funding mechanisms for sidewalk improvements.

Objective 2: Update the Subdivision Regulations to require sidewalk, curb and gutter improvements for all new subdivisions, regardless of size of lot or project, in the Town of Woodsboro.

Action Item: The Planning & Zoning Commission will undertake a review of the current regulations and make recommendations to the Town Board related to sidewalk, curb and gutter requirements.

Objective 3: Perform the engineering and design for sidewalks, curbs, gutters and related improvements along any non-standard street or alley, within the Woodsboro corporate limit.

Action Item: Develop a design standard and then evaluate its feasibility for application to Woodsboro's non-standard streets and alleys.

Action Item: Meet with adjacent landowners of identified streets and alleys to discuss the project and get feedback on their interest in a front foot benefit assessment to initiate the necessary improvements.

Objective 4: Begin planning for pedestrian safety measures at the two, lighted intersections on the MD 194 bypass in order to facilitate access to the existing Town parkland from downtown and to downtown businesses and services from the east side of MD 194.

Action Item: Facilitate a meeting with the State Highway Administration to discuss these two intersections and the need to provide safe pedestrian access to the Town Park and downtown businesses.

Action Item: Consider a single pedestrian bridge over MD 194 somewhere between the two lighted intersections where the ground elevation is already above street level.

Goal 2: To provide a reliable network of streets and alleys that are regularly maintained, repaired, and improved.

Objective 1: Review, update and supplement existing construction standards for roads, sidewalks, curb, gutter and related public improvements and infrastructure found in the Subdivision Regulations.

Objective 2: Initiate transportation planning efforts into a Town of Woodsboro 5-Year Road Maintenance Program.

Chapter 7

Community Facilities

This chapter describes the existing and proposed Community Facilities for the Town of Woodsboro. A discussion of the public school facilities that serve the community starts the chapter and includes information on school enrollment, capacity and future, planned improvements. Following the schools section is an assessment of the parks and recreation facilities maintained by the Town.

The Town water and sewer system and service is described next; this section includes maps of the County's Water and Sewer Service Plan, which delineates planned water and sewer service areas in and around Woodsboro. Other community services such as regional libraries and public safety are presented prior to the chapter conclusion, a listing of Community Facilities Goals, Objectives and Action Items.

A more robust discussion of the Town's Water and Waste Water systems – and how these systems affect future growth - is undertaken in Chapter 9, Water Resources.

Community Facilities Goals

- Provide more than adequate services and infrastructure for the current and future projected population.
- Maintain the existing parkland and associated facilities and provide additional recreational facilities to meet the needs of a growing population.
- Improve public safety and security in the Town of Woodsboro.

Schools

Three schools in the Frederick County Public School (FCPS) system serve Woodsboro: New Midway/Woodsboro Elementary School, Walkersville Middle School, and Walkersville High School. The New Midway/Woodsboro Elementary School is a single school operating out of two facilities, one located on Liberty Road in the Town of Woodsboro and the other on MD 194/Woodsboro Pike north of Town. The Woodsboro school facility serves the primary grade levels, pre-kindergarten through second grade. The New Midway serves the third grade to fifth grade population. Built in 1930, New Midway is considered an intermediate level school. Both the middle and high schools are located on Frederick Street in the Town of Walkersville.

School enrollment and capacity information for the three schools serving Woodsboro is found in Table 8. As of October 8, 2007, New Midway/Woodsboro ES and Walkersville MS were operating below the stated rated building capacity, while the high school is over capacity.

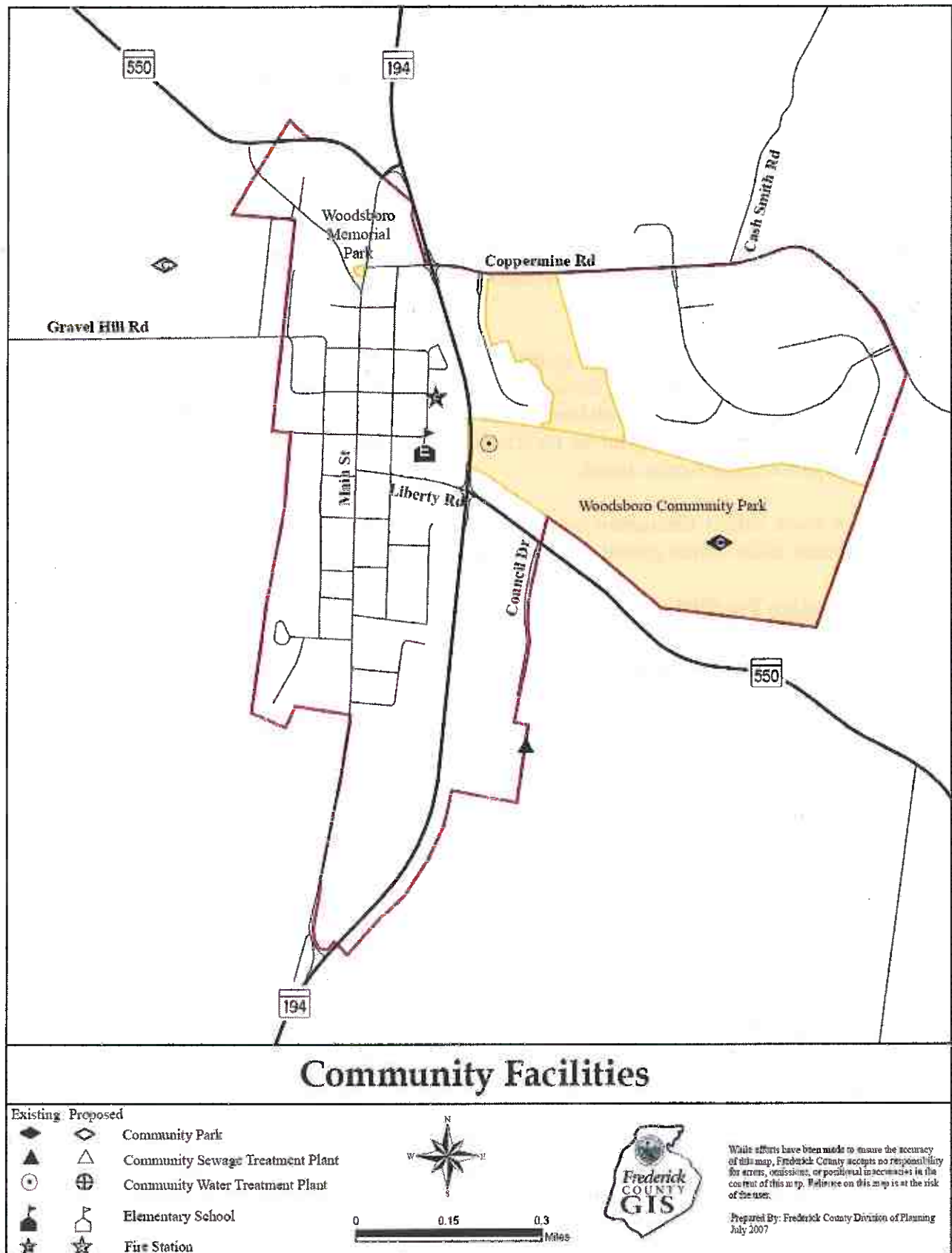


Table 8: School Enrollment and Capacity Data

School	Equated Enrollment	State Rated Building Capacity	Percent of Capacity
New Midway/Woodsboro ES	322	340	95%
Walkersville MS	867	1,051	82%
Walkersville HS	1,284	1,197	107%

Source: Board of Education, Enrollments and Capacities Report, October 2007.

The 2007 Educational Facilities Master Plan (Board of Education) offers enrollment projections for Frederick County Public Schools through 2016. In 2016, the New Midway/Woodsboro ES is projected to have 389 students enrolled. Walkersville MS is projected to have 997 students and 1,207 students are estimated for Walkersville HS. The Fiscal Year (FY) 2008 – 2013 Capital Improvements Program for Frederick County identifies an addition for Walkersville High School from 1,200 to 1,500 seats. This represents the ultimate size for the school. The addition is dependent on continued growth in the feeder area; funding has not been secured for this project. Planning funds for the project will be requested in FY 2012 and the construction funds will be requested in FY 2013.

There are no new public schools proposed or planned for Woodsboro in the County's Capital Improvement Program or the Educational Facilities Master Plan. There is an elementary and a middle school symbol placed on the 20-year land use plan map associated with the Walkersville Region Plan (2006) along the MD 26 corridor in Walkersville's community growth boundary. The symbols identify potential sites for school locations where future needs will likely be more pressing.

Parks and Recreation

The Town has one public park, the Woodsboro Community Park, funded through Project Open Space to serve its residents. The park consists of 87 acres of active and passive recreation area on the east side of MD 194; there are three (3) ball fields, a tot lot, two (2) tennis courts, two (2) basketball courts, a fishing area, and areas for picnicking and walking. A disc golf course is in the final design phase. Israel Creek runs through the park. Just north of the park property is an additional 19 acres of Israel Creek floodplain owned by the town. This property is protected from future development as part of Copper Oaks subdivision approvals and is intended to stay in a natural state. A pathway runs through the property connecting the subdivision with the Community Park. Woodsboro's other recreation areas are associated with the elementary school; there is a small playground and ball field on site.

The Community Park is not easily accessible to the majority of town residents. Located on the east side of the bypass, pedestrian and bicycle access from the west side of town, where the majority of residents are concentrated, is dangerous and therefore restrictive. This has raised the need to plan for public park space on the west side of the bypass. The primary need would be for a neighborhood park (one to two acres in size) that would accommodate a playground and informal playing field for young children. A possible location is the south end of Main Street. A future, proposed community park symbol is depicted on the west side of Town on the

Community Facilities and Comprehensive Plan maps.

The County's Bikeways and Trails Plan (2001) identifies a trail corridor along Israel Creek connecting Woodsboro's Community Park with the Monocacy River. This trail system could serve both pedestrians and cyclists.

Water and Sewer

The Town of Woodsboro operates its own water and sewer system, which serve development within the town limits. The ability to provide adequate services and the capacity of the existing resources and infrastructure impact the amount of growth the Town is able to accommodate. This Plan projects that an additional 540 people will live in Woodsboro over the next 20 years. To accommodate this population, the Town will need to evaluate its water and sewer service to determine whether they can provide service to the projected population.

The County's Division of Planning provides Water and Sewer Service maps on a countywide basis. These maps show existing, planned and ultimate service areas. Water and sewer service maps for Woodsboro are provided in this chapter. Categories for water service include W-1, Existing Service; W-3, Planned Service within 3 years; W-4, Planned Service within 4-6 years; W-5, Planned Service within 7-20 years; NPS, No Planned Service; and US, Ultimate Service. The sewer service categories are S-1, S-3, S-4, S-5, NPS, and US. The same descriptions apply.

Water System

The Town's water system was developed in the 1950s and includes five active wells in Frederick Limestone (Nos. 2, 2A, 3, 7, and 14) and one inactive well in Grove Limestone (No. 1). The wells range in depth from 125 to 600 feet and yield between 18 and 70 gallons per minute. Water storage is provided by a 50,000 gallon elevated tank and 250,000 gallon ground level tank with an associated booster station. Water is distributed via 8" and 12" water mains.

A Water Adequacy Report was prepared for Woodsboro in 2004. The report stated that the limiting factor to Woodsboro's water supply is appropriation permit limits. These limits are set and enforced by the state and give the Town an authorization to withdrawal a specified amount of water per day. Communities that rely on wells for their water supply must have an adequate amount of undeveloped land, called a recharge area, to allow their aquifers to recharge from rain events. The appropriation permit is in part based on the amount of land area in the well-fields recharge area. The well-field capacity of the aquifer must be sufficient to supply demand.

The report presented data on the Town's water usage. The water usage per capita is 120 gallons per day (gpd) and the usage per water connection is 250 gpd. The town's annual average water consumption is 120,000 gpd. Water demand in Woodsboro is primarily by residential users (90%); commercial and industrial users each demand 5% of the Town water supply.

The Town's water supply originates from limestone aquifers that are characteristically

cavernous and provide large conduits for rapid ground water flow. Limestone aquifers are susceptible to surface water infiltration, which can easily enter and mix with ground water. The Town's wells are therefore vulnerable to contamination from surface water. Several sources of potential contamination exist in Town, which could affect the wells; they include an industrial park, commercial establishments, agricultural operations, the Town's sewage collection system, and stormwater structures. Wells could also risk contamination from viruses, bacteria, and chlorine resistant protozoan.

In 1997, Maryland Department of the Environment's Public Drinking Water Program prepared a Wellhead Protection Plan report at the request of the Town. The report delineated two Wellhead Protection Areas, which represent the land area that contributes water to the town's six well sites. Well No. 1, which is not in active service, has a recommended WHPA that is 4,000' in length by 2,000' width. The area is situated northwest of Town on either side of MD 550. The recommended WHPA for Well Nos. 2, 2A, 3, 7, and 14 is 5,200' in length and 3,200' in width and includes most of the town east of the narrow ridge that runs west of Main Street.

Despite concerns about the Town's water quality, Woodsboro's treated water met drinking water standards during the 1997 review. The report stated that disinfection is the only treatment used on water prior to distribution.

Sewer System

Woodsboro constructed its wastewater treatment plant (WWTP) in 1980 in response to the prevalence of failing individual septic systems within town limits. Prior to its construction, individual septic systems were experiencing a failure rate of up to 70%. Initially the WWTP was constructed to serve a population of 450 with capacity for an additional 207 people. An upgrade to the plant occurred in 2004 increasing its design capacity to 250,000 gpd. Using an average rate of 250 gpd per equivalent dwelling unit (EDU), which incorporates residential infiltration and inflow and commercial/industrial flows for an average community, Woodsboro could provide 1,000 EDU's or approximately 3,100 people with sewerage service.

The WWTP, described as a contact stabilization plant, is located at the end of Council Drive at the southeast corner of Town. According to the draft *Frederick County Water and Sewerage Plan* (2007), the WWTP "consists of comminutors, an aeration chamber, secondary clarifier, chlorination chamber, dechlorination chamber, re-aeration chamber, aerobic digester, and sludge watering beds. Built nearly thirty years ago, the collection system includes 20,000 linear feet of 8 and 10-inch PVC pipe, 400 feet of 4-inch iron force main and a package lift station. The plant discharges its treated effluent into Israel Creek, approximately 9.5 miles north of the City of Frederick and Fort Detrick water intakes on the Monocacy River. Israel Creek flows into the Monocacy River in the vicinity of Ceresville.

A map of Woodsboro's sewer service area that shows the location of the WWTP and all existing and planned service areas in Woodsboro is included after the water service map.

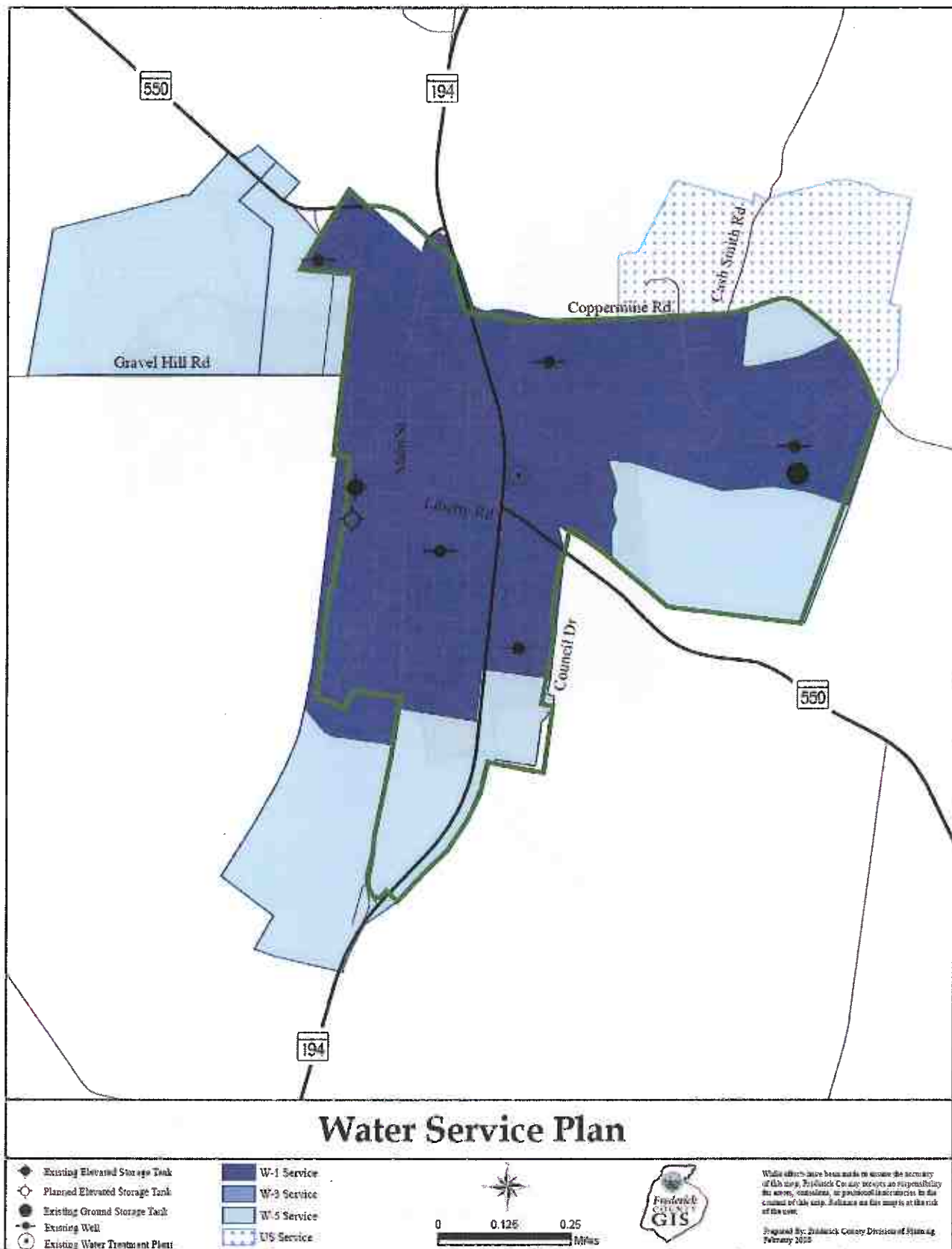
Other Services

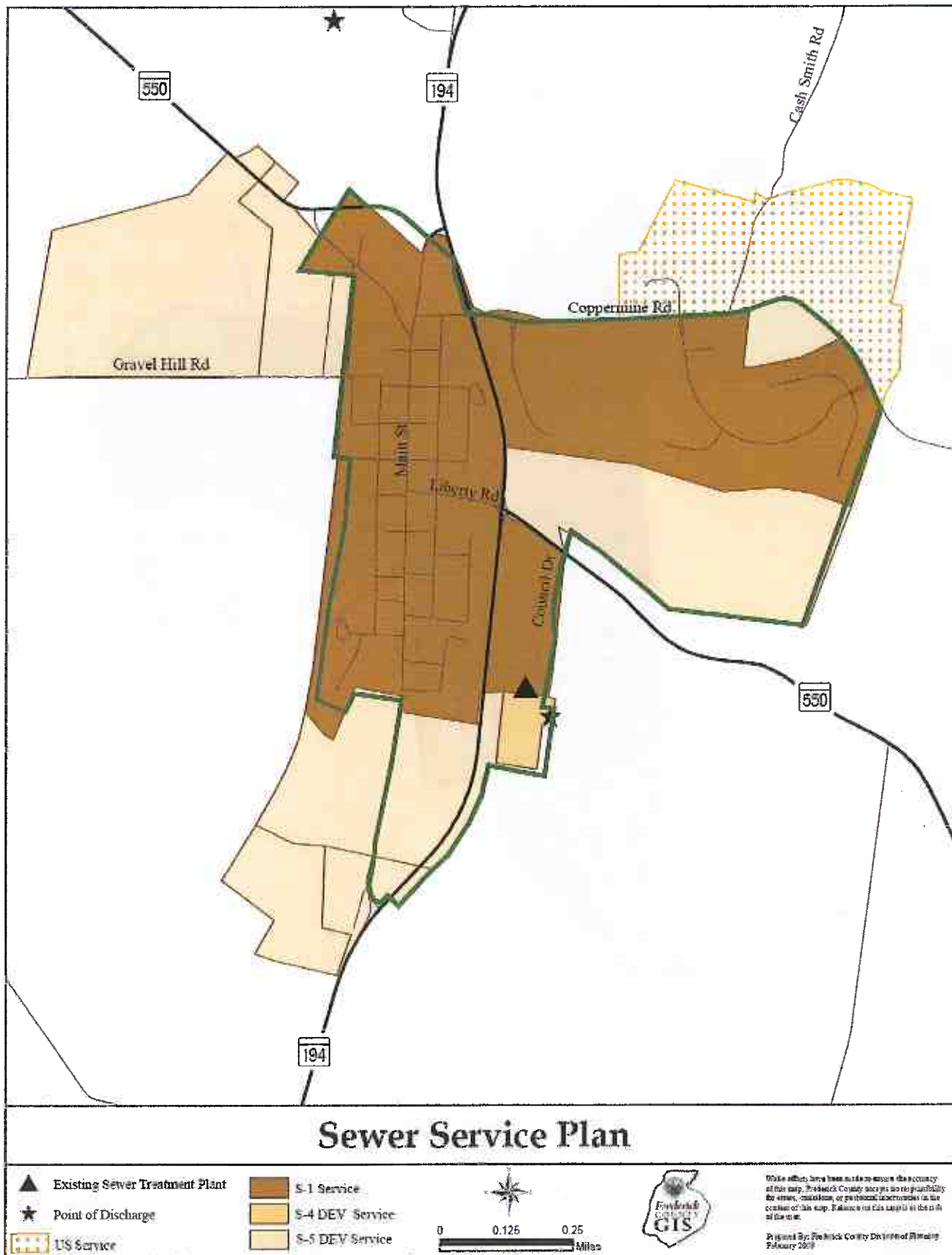
Library

While there is currently no library facility located in Woodsboro, the town has identified a need for a future library facility. At present, the closest Frederick County branch library is in the Town of Walkersville. The County's FY 2008-2013 CIP includes a new 15,000 square foot library located in Walkersville. The new facility is projected to open in 2010.

Public Safety

The Woodsboro Volunteer Fire Company is located on Third Street in Woodsboro. This facility provides fire protection and ambulance services to area residents. The County Sheriff's office and the State Police provide police protection.





Community Facilities Goals, Objectives and Action Items

Goal 1: To provide more than adequate services and infrastructure for the current and future projected population.

Objective 1: The Town Board shall develop and adopt a Capital Improvements Program that includes planned and programmed improvements to the Town's services and infrastructure.

Action Item: The Town Board shall consider the feasibility, cost, funding and priority of various Capital Improvement projects that may include but are not limited to:

- a. Water and Sewer - water meter replacements, well monitoring, replacement of aging infrastructures
- b. Streets and Roads - sidewalks, curb, gutter, resurfacing
- c. Utilities and Services - pulling back and/or burying of overhead lines, improved communication reliability and services from voice/data/wireless providers
- d. Historic Preservation - Woodsboro Historical Society projects and interests
- e. General Town Appearance - projects to be determined
- f. Other projects as identified

Objective 2: The Town of Woodsboro will obtain any necessary, additional water appropriations from the state to accommodate all land planned for development in the 20-year land use plan.

Action Item: The Planning and Zoning Commission will work with the Town Board to determine the Town's future water needs and will facilitate a request to the state, as needed.

Objective 3: Develop a tracking system for available water and sewer tap allocations that correspond with the subdivision and development review processes.

Action Item: The Town Board Liaison to the Planning and Zoning Commission will be responsible for making regular reports on water and sewer tap allocations to the P&Z Commission.

Objective 4: Determine whether there is a future need to include an Adequate Public Facilities Ordinance in the town codebook to include, but not limited to water, sewer, roads, schools, and public safety.

Action Item: The Planning and Zoning Commission will study the relevance of an APFO and report to the Town Board.

Objective 5: Provide high quality, fluoridated water to serve existing and projected properties within the town limits.

Action Item: The Town Board shall undertake a feasibility study to consider the cost and implementation of fluoridated water in the Town's supply.

Goal 2: To maintain the existing parkland and associated facilities and provide additional recreational facilities to meet the needs of a growing population.

Objective 1: Investigate development of a town-owned park on the west side of MD 194.

Action Item: The Parks and Recreation Commissioner shall work with the Woodsboro - New Midway Recreation Council to determine whether a park is needed on the west side of MD 194. Their assessment will include the acreage requirements, type of facilities, potential location(s), and funding sources for a new park.

Objective 2: Undertake a community wide study to determine the needs and feasibility of developing a community center in Woodsboro.

Goal 3: To improve public safety and security in Woodsboro.

Objective 1: Increase the level of police presence in Woodsboro.

Action Item: Review the current level of daily patrols and make recommendations for any changes or improvements.

Objective 2: Provide speed monitoring at major intersections.

Action Item: Understand and engage in the latest initiative to increase speed monitoring the in rural county areas by the County Sheriff's Office and State Police.

Action Item: Consider requesting cameras for the lighted state highway intersections.

Objective 3: Address zoning violations, planning and zoning customer service and outreach on property issues at the local level.

Action Item: The Town Board should consider hiring a part-time Town Planner/Zoning Administrator to administer the Zoning Ordinance and Subdivision Regulations. This individual would provide customer service and general outreach to land and business owners in need of zoning certificates, building permit assistance, and general questions about planning and zoning in Woodsboro and provide staff support to the Planning and Zoning Commission and Board of Appeals.

Action Item: The Town Board shall address Woodsboro's zoning code

enforcement issues through the hiring of a general Code Enforcement Officer. This individual will ensure that zoning violation resolutions become proactive, rather than reactive, whenever possible.

Chapter 8

Water Resources

This Water Resources Element (WRE) of the Woodsboro Comprehensive Plan is a long range planning requirement mandated by Maryland House Bill 1141 approved by the Maryland State Legislature in 2006. The purpose of this element is to assess water resource capacity to insure that the current and future needs of the community are met. Three statutory requirements guide this document:

- To identify drinking water and other water resources that will be adequate for the needs of existing and future development proposed in the Land Use Element of the plan, considering available data provided by the Maryland Department of the Environment (MDE).
- To identify suitable receiving waters and land areas to meet the storm water management and wastewater treatment and disposal needs of existing and future development proposed in the land Use Element of the plan, considering available data provided by MDE.
- To adopt a WRE in the Comprehensive Plan on or before October 1, 2009, unless extensions are granted by Maryland Department of Planning. (Woodsboro has received an extension from MDP establishing the deadline for adoption until October 1, 2010.)

The plan is organized around the following components:

- Drinking water Assessment
- Wastewater Treatment Assessment
- Managing Storm Water and Non-Point Source Pollution

Included within these components are discussions of the watershed resources of the Town and region; the quality and quantity of drinking water supplies with respect to planned growth; the treatment capacity of wastewater treatment facilities and disposal of treated effluent; a review of the Town's storm water management efforts; and recommendations for sound land and water management practices that contribute towards the health and sustainability of our regional watershed system as well as the vitality of our small town community.

Water Resource Goals

- *Maintain a safe and adequate drinking water supply to accommodate the needs of the current Town population as well as future generations.*
- *Protect and enhance the quality of Woodsboro's surface waters, ground water resources, and wetlands.*
- *Invest in water and sewer infrastructure that will provide adequate treatment capacity and reduce pollutant loading to rivers and streams.*
- *Promote coordinated planning between jurisdictions and agencies responsible for drinking water, wastewater, and storm water management.*
- *Engage the public in watershed conservation and promote a stewardship ethic.*

Water Resource Policies

- *Provide community water/sewer service only within the Town's Growth Area.*
- *Stage development within the Town's Growth Boundary according to the adequacy of drinking water.*
- *Encourage the use of Environmental Site Design techniques in the development – and redevelopment – of properties in Woodsboro.*
- *Provide local incentives to homeowners, businesses, and developers who institute water-saving practices or improvements.*
- *Coordinate stormwater management facilities and strategies to insure that efforts are not duplicated and that performance is enhanced.*

Coordination with Frederick County Plans

This Water Resources Element is linked to three Frederick County-produced planning documents including the Frederick County Land Preservation, Parks and Recreation Plan, the Frederick County Water and Sewerage Master Plan, and the Countywide Comprehensive Plan

The Land Preservation, Parks and Recreation Plan, approved in 2006, provide the County's goals for land preservation and natural resources protection and discuss the development potential of the County's agricultural and rural areas.

The County's Water and Sewerage Master Plan provides a detailed description of the County's water and sewer systems for both the County's systems and those maintained by the individual

municipalities, including the Town of Woodsboro. The Plan includes background on the physical geography of the County (i.e. geology, climate, and hydrology) and provides detail on vulnerabilities and limitations to water and sewer service based on environmental factors.

The County's long-range land use planning document, Frederick County's Future: Many Places, One Community-A Comprehensive Plan for Frederick County, MD (2010), establishes a framework for growth management that focuses future land use development within designated growth areas. The Town of Woodsboro is identified as one of these County growth areas and there is general agreement between the jurisdictions as to the boundaries of such future growth.

Regional Water Resource Planning

With an additional 1.1 million people expected to reside in the State of Maryland over the next 25 years, population growth and its associated water resources challenges are anticipated in Frederick County and its municipal communities. In addition to addressing the competing needs of residential, agricultural, and commercial/industrial development, local governments will need to review their land use plans to ensure delivery of water and sewer service to a larger customer base. Alternative supplies and additional storage may be needed to augment smaller community systems and wastewater treatment facilities may require upgrades to reduce the concentration of pollutants in their discharge. There will be additional well and septic development on rural lands, which will affect groundwater levels and transport additional nutrients to local streams. The conversion of forests and agricultural land for development will impact watershed health and new rooftops, roads, and driveways will increase our total impervious surface area, inhibiting natural recharge of water.

Frederick County's location within the Chesapeake Bay watershed offers its other major challenge. The County's major water bodies, the Monocacy River and Catoctin Creek, meander south through the County directly into the Potomac River, which then flows into the Chesapeake Bay. These water bodies carry runoff from the land and discharge from point sources such as wastewater treatment plants to the Bay. Sediment and topsoil, fertilizers and pesticides, oil, pet waste and emerging contaminants (pharmaceuticals and endocrine disruptors) are examples of pollutants that enter local water bodies. Once in the Bay, these pollutants disrupt the natural balance of the estuary, depleting fish, crab and oyster populations and posing serious health risks for bathers, fish and related species.

The challenges associated with growth are not new or unique to Frederick County; in fact, communities across the country and region are dealing with many of them and have found reasonable solutions. The County's water resources plan takes in to account the diversity of water resources issues, limitations and vulnerabilities that Frederick County and its twelve municipalities are facing and offers recommendations for potential solutions. Subsequent updates to the County water resources plan will benefit from new sources of data and technical experience that will expand upon the initial efforts of the County and its municipalities.

Environmental Characteristics and Water Resources

Geology

The Town of Woodsboro is located at the western edge of the Piedmont Plateau Province. The Piedmont, which literally means “to the feet of the mountains”, is the plateau region of the eastern United States situated between the Atlantic Coastal Plain and the eastern mountain ranges. Catocin Mountain, which runs parallel to US Route 15 west of Woodsboro, forms the eastern boundary of the Blue Ridge Province. Generally, the Piedmont “is characterized by relatively low, rolling hills with heights above sea level between 200 feet (50 m) and 800 feet to 1000 feet (250 m to 300 m).”

According to the Maryland Geological Survey (2007), the Piedmont is composed of a complex geology including hard, crystalline igneous and metamorphic rocks. The Glade Valley consists predominantly of Frederick limestone (a thin bedded, dark blue limestone with dark, irregular clay partings) and Grove limestone (a thick bedded, fine grained, light to dark gray limestone). Grove Limestone underlies the western side of Woodsboro and Frederick Limestone underlies the east. An intrusive dike, a body of igneous rock crystallized from molten magma, runs in a north-south direction through the center of town. The composition of the north-south ridge just east of Woodsboro is a mixture of Antietam quartzite and shale.

Future land use development surrounding Woodsboro is geologically constrained both by the topography – due to the difficulty in the laying out of an interconnected road network across steep slopes – and by the long term commercial mining activity that forms a distinctive barrier to feasible expansion of municipal boundaries to the north and southeast.

Surface Water Resources

The Monocacy River, located just west of the Town of Woodsboro, is the largest tributary to the Potomac River, which ultimately meets the Chesapeake Bay. The river’s headwater streams are Marsh Creek and Rock Creek, which converge at the Mason-Dixon Line. Other surface water resources in Woodsboro are Israel Creek, which runs north/south just east of MD Route 194 through the Woodsboro Community Park. The headwaters of Glade Creek are located west of MD Route 194 in the area of the Glade Valley Golf Club. Both Israel and Glade Creek drain directly into the Monocacy River.

In the Woodsboro area, river and stream banks are not steep and water is relatively slow flowing over flat land. Surface storm drainage flows south and southwest to the Monocacy. Presently, no surface water is used for public water supply or storage. A map detailing stream corridors and floodplains is located on page ____.

Groundwater Resources

Groundwater is found below the surface of the land, moving through rocks and soil toward discharge in a stream, spring or other water body. The quality and quantity of groundwater are of significant concern in areas where surface water is not available for public supply. In these areas, the potential for development may be limited, given the availability of groundwater resources.

The Woodsboro area boasts productive limestone aquifers, classified in the U.S. Geological Society's Hydrologic Unit I. Average well yields in the Frederick and Grove Limestone areas (and other rock formations in Hydrologic Unit I) are expected to be 25 gallons per minute with a 74% chance of obtaining a yield of 10 gallons per minute or more.

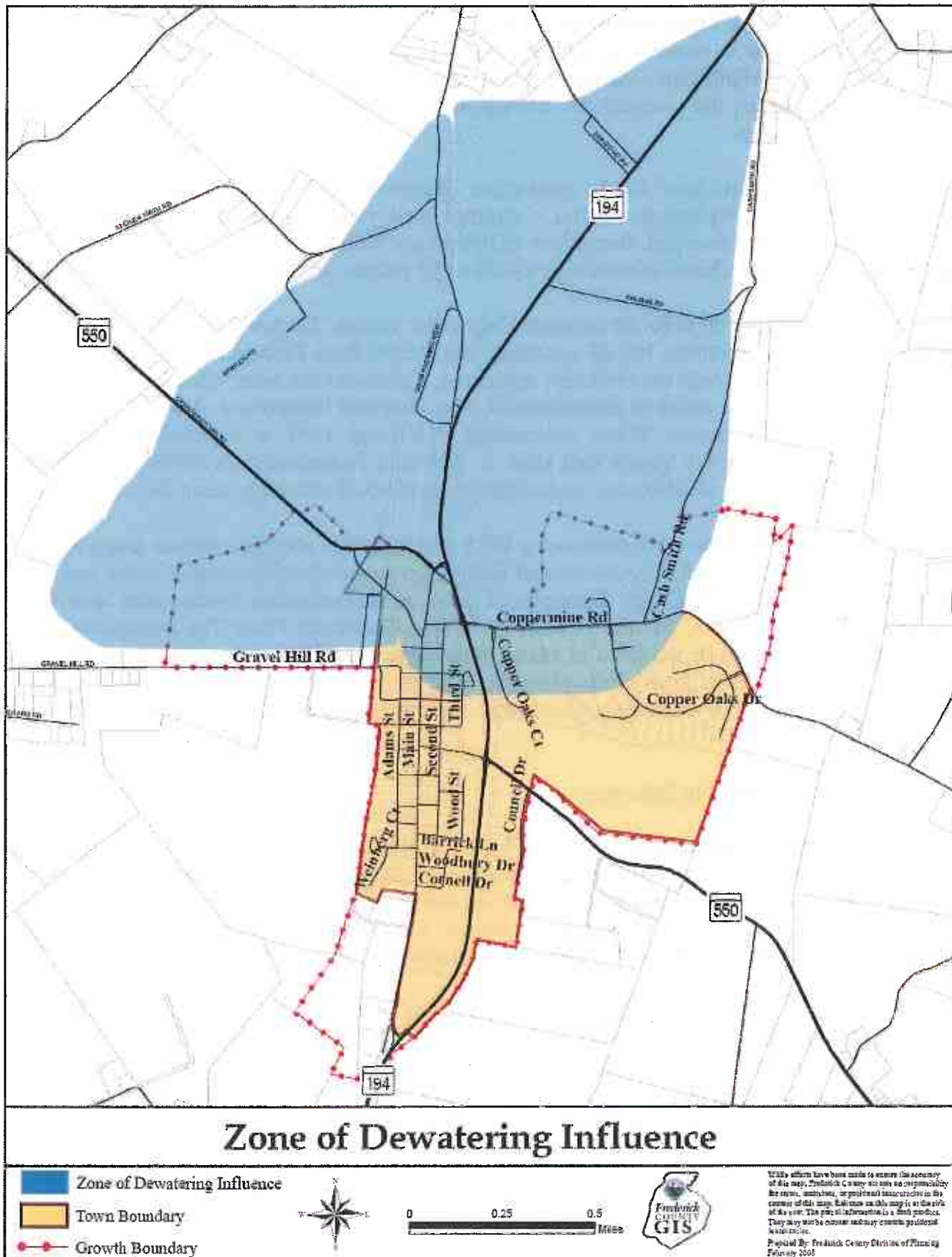
The town relies on wells for its community water system. The town's Well No. 1 obtains water from Grove Limestone, but all remaining wells draw from Frederick limestone. Despite their high productivity, both the Frederick and Grove formations are water table carbonate rock aquifers, which are susceptible to contamination. The Maryland Department of the Environment (MDE) performed a Source Water Assessment (SWA) in 1997 to establish a Wellhead Protection Area around the town's well sites. A Wellhead Protection Area (WPA) is the area around the town's wells in which any contaminant present could ultimately reach the well.

The results of their study produced a WPA and identified potential sources and types of contamination for each well. The assessment focused on potential contamination issues and did not address groundwater recharge. Examples of potential contamination sources were quarries, underground storage tanks, and the Town's Wastewater Treatment Plant. The assessment also listed recommendations to the town to ensure future water quality and quantity. Examples of recommendations include: form a local planning team; public awareness and outreach; develop a local wellhead protection ordinance; monitoring; and purchase/preserve land around the town's wells.

Zone of Dewatering Influence

The Maryland Department of the Environment (MDE) established a zone of dewatering influence around the Barrick and LeGore quarries north of the Town of Woodsboro. The extent of the zone of dewatering influence is based on topography, watershed boundaries, geologic factors, including the occurrence of natural fractures, lineaments, igneous dikes, and changes in rock type and variations in the water bearing characteristics of the underlying geology.

Mining operations are required to repair sinkholes within the zone if MDE determines it resulted from quarry dewatering. They are required to replace a water supply (i.e. private well) that fails due to declining water levels caused by mining operations. If the damage cannot be repaired, the company is responsible for compensating the landowner. Remedies provided by the mining companies apply to improvements made prior to the effective date of issuance of the zone. Woodsboro's zone was issued in the late 1990s.



Drinking Water Assessment

Healthy watersheds provide a safe and sustainable drinking water supply. With more than 1,400 miles of rivers and streams in Frederick County, water appears abundant. The perception of abundance highlights the importance of water resources planning. While water may be plentiful certain days or seasons of the year, levels or supplies may be dramatically lower in others. Summertime demand, in particular, puts pressure on the region's water resources when supplies are lowest, but demand is high.

This drinking water assessment investigates drinking water supply; drinking water demand; major issues related to drinking water; and drinking water policies and projects for the Town of Woodsboro. The current drinking water supply for the municipality is compared with the projected build out of the designated community growth area in the Woodsboro Comprehensive Plan.

Drinking Water Supply

In Frederick County, drinking water is obtained from both surface water and ground water sources. Although Woodsboro's drinking water derives solely from groundwater sources, it is important to comprehend how the two supplies are intimately related; ground water is stored in aquifers and crevices beneath the ground that are recharged by precipitation. In an unconfined aquifer, the most common in Frederick County, ground water moves horizontally before it is discharged into a stream or other surface water body, such as a seep, spring, or wetland. Stream flow directly correlates with the rise and fall of the water table; both are impacted by climatic and drought conditions.

Disruptions to the natural hydrologic cycle caused by land use changes, affect the availability of both supplies. The steady increase in the County's population that is expected over the next twenty years will impose limitations on our water resources. Increased land development reduces water recharge areas and has the potential for introducing new pollutants and contaminants to watersheds. This section assesses the regional availability of ground water and surface water and presents the limitations of each.

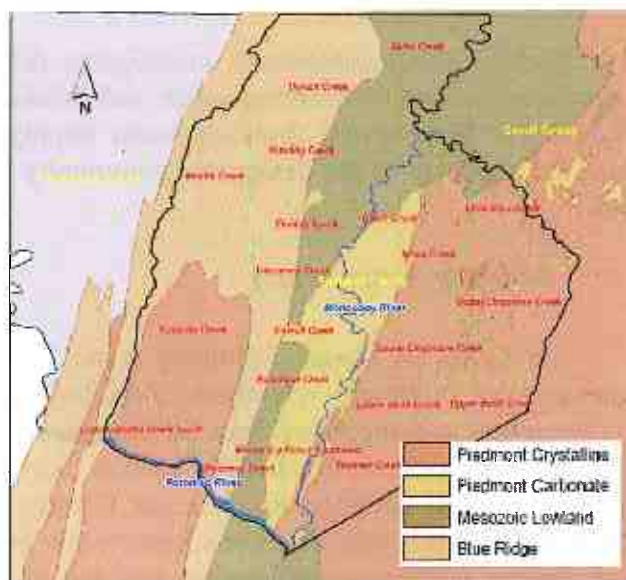
Ground Water

The available supply of ground water in Frederick County is dependent upon the underlying geologic conditions. In most areas, the water bearing characteristics of the geology offer low storage capacity and low transmissibility. An extensive stream network and the nature of fine particle soils contribute to these characteristics. The United States Geologic Survey (USGS) and Maryland Geological Survey have generalized the water yielding character of the County's aquifers and organized them by hydrogeomorphic region. The four regions located in Frederick County are Blue Ridge, Piedmont Crystalline, Piedmont Carbonate, and Mesozoic Lowlands (see Figure X).

Each region is further defined by its Hydrologic Unit, which is numbered I – III. The most productive aquifers, Hydrologic Unit I, include the karst aquifers of the Frederick and Glade Valley (Piedmont Carbonate). The poorest aquifers, in terms of yield and capacity, include fractured rock aquifers in the Mount Airy, Ijamsville, and Jefferson areas (Piedmont Crystalline). Table Xa presents the estimated yield and availability by acreage for the four regions during both average and dry years. Woodsboro's source of drinking water derives from the Piedmont Carbonate karst aquifer.

Figure X: Hydrogeomorphic Regions

While karst aquifers, such as Woodsboro's, provide the highest storage and capacity, they are more vulnerable to surface water contamination than most other aquifers. As a result, ground water in these areas can be contaminated with pathogenic organisms from septic systems and animal waste. Public water systems served by these relatively unprotected ground water sources are required to meet certain treatment requirements; however private wells serving homes and small businesses are less able to meet the complex treatment requirements.



In addition to geology, climatic conditions impact supply of ground water. With water table conditions being most prevalent, seasonal variation in groundwater is a limitation to its use as a reliable supply. In a recent evaluation of the Catoctin Creek watershed, it was concluded that groundwater may be an adequate source during average precipitation years, but under drought conditions, groundwater supplies are not adequate to meet existing demand and support the biological and natural resources of the watershed¹. Ground water limitations are accentuated during the summer months. Mid-June through mid-September is the driest time of the year and ground water supply declines significantly during the summer quarter in all of the County's watersheds.

¹ 2006. MDE. *An Evaluation of Water Resources in the Catoctin Creek Watershed, Frederick County, Maryland.*

Table: Xa Annual water budget predictions of annual recharge, by hydrogeomorphic region				
	<i>Piedmont Crystalline (PCR)</i>	<i>Mesozoic Lowland (ML)</i>	<i>Blue Ridge (BR)</i>	<i>Piedmont Carbonate (PCA)</i>
Average Year				
Yield (gpd/acre)	630	390	910	1,000
Total Acres	179,514	81,284	111,747	54,851
Total Availability (gpd)	113,093,801	31,700,861	101,690,198	54,850,650
Dry Year - 20 Yr Drought				
Yield (gpd/acre)	390	180	510	1,000
Total Acres	179,514	81,284	111,747	54,851
Total Availability (gpd)	70,010,448	14,631,167	56,991,210	54,850,650

Water Balance Methodology

The amount of ground water available to a community is difficult to predict since aquifers are not confined to topographic, political or even watershed boundaries. Availability is based on the amount of recharge (in the form of precipitation and septic system discharge) to the aquifer minus the amount of water required to provide base flow to streams. This method provides an estimate, usually on a watershed scale, and is not used to guarantee the availability of water at any particular well.

The water balance method has been utilized in the Monocacy River watersheds. In a Monocacy River watershed pilot study (2004), ground water was projected to be available in 2030 in all sub-watersheds after demand and reserve flows were accounted for; however, summer conditions were not incorporated into the findings. While the Linganore Creek sub-watershed was estimated to have the highest ground water availability at 13.38 mgd, it was determined that the sub-watershed with the lowest expected availability – at 2.71 million gallons per day (mgd) in 2030 - was the Israel Creek watershed that serves the Walkersville and Woodsboro communities.

The water balance method is used by MDE for distribution of ground water appropriation permits for community water systems. To apply for a permit, a community must own sufficient undeveloped land resources to allow for recharge of the aquifer they intend to withdrawal from. This policy primarily affects municipalities who are constrained by a municipal boundary with respect to where their wells are located. These communities must develop under state Smart Growth policy, which prescribes higher densities for growth areas, while also identifying land resources to keep in permanent open space for their groundwater appropriations.

In sum, the most limiting factor in the near future for the Town of Woodsboro will be the difficulty in locating sufficiently high yielding well sites for public water supplies necessary to meet projected population demands.

Surface Water

Like ground water levels, surface water flows vary seasonally and daily. There are periods of time when surface water levels become low or may not flow at all. Drought periods emphasize seasonal fluctuations. For example, a USGS stream gage on Catoctin Creek measured zero (0) for 17 consecutive days during the 1966 drought of record and visual observations during the 2002 drought confirmed dry conditions on tributaries of Catoctin Creek. The county's smaller streams, like Catoctin Creek, are impacted by natural variability in flow and without in-stream reservoirs or similar storage capacity, are ineffective as a reliable surface water supply.

An additional limitation to developing a public drinking water source using surface water is meeting the flow-by requirements mandated by the State of Maryland. This requirement, which protects the biological integrity of the stream, is based on the 7 day, 10-year low flow. Without a reservoir or adequate storage, streams cannot meet the minimum required flow all of the time². Through a consent order, the City of Frederick and the Maryland Department of the Environment set a flow-by requirement of 50 cubic feet per second (cfs) for the Monocacy River at the Jug Bridge stream gage for the City's upstream intake. During the 2002 drought, when levels dropped to 20 cfs, there was not adequate flow in the river to meet the flow-by; therefore, use by the City was restricted.

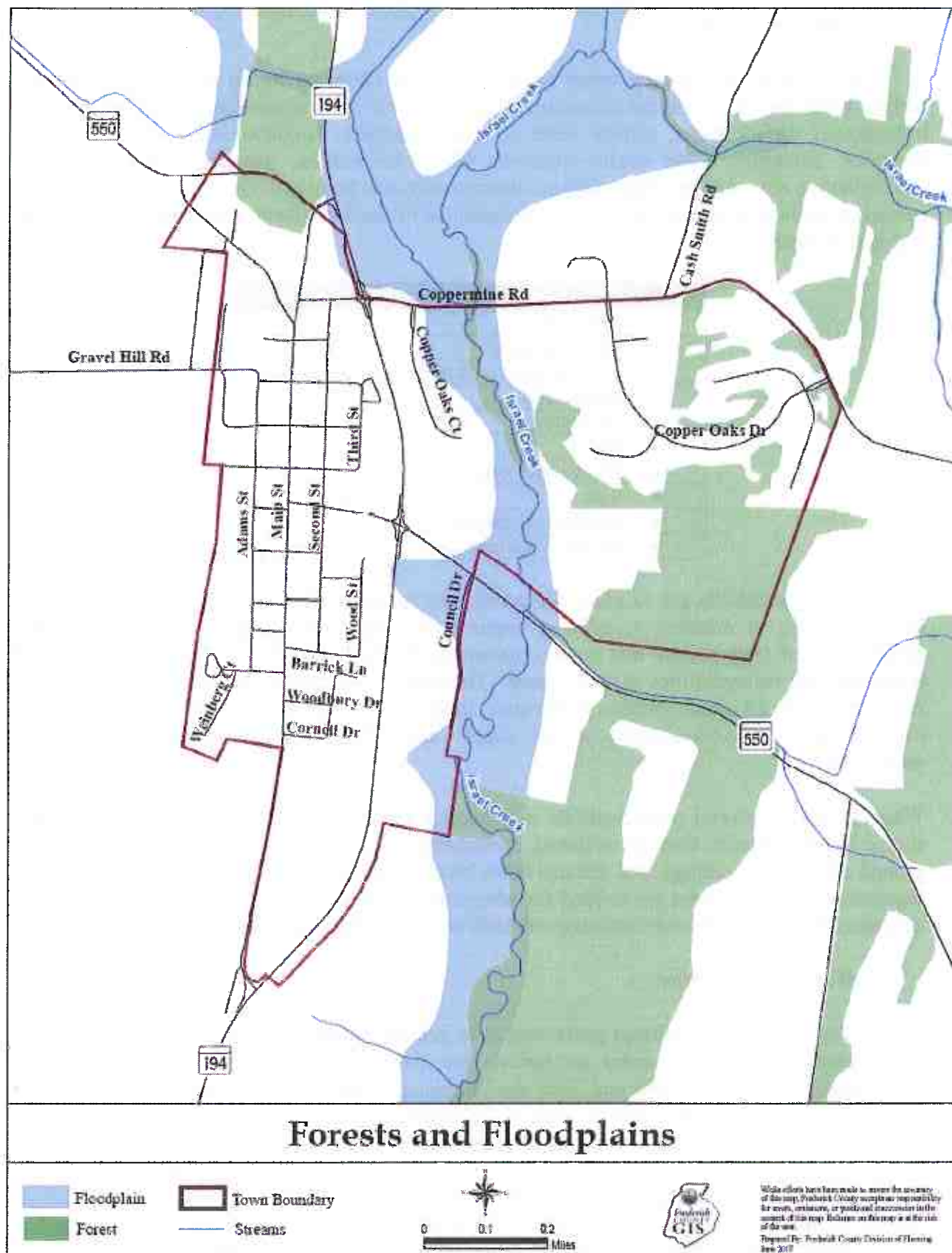
The most abundant surface water supply available to Frederick County is the Potomac River. The river drains a watershed of 14,679 square miles encompassing parts of West Virginia, Virginia, Maryland, Pennsylvania, and the District of Columbia. The river originates at Fairfax Stone, WV and runs 383 miles to its confluence with the Chesapeake Bay at Point Lookout, MD. It is estimated that the Frederick County land area contributes 419 billion gallons of water per year via runoff to the Potomac River or 1.15 billion gallons per day (Frederick County Water and Sewerage Plan 2008). Frederick County's use of the Potomac River as a drinking water source is considered non-consumptive, meaning that more water is returned to the Potomac River than is withdrawn by the various users.

The abundance and consistency of the Potomac River supply has leveraged it to become the County's principal source of public drinking water. Other existing sources of surface water in the County, such as the Monocacy River, have availability limitations that restrict their use as a primary source in the short or long-term. Those limitations include natural variability of stream flow, inability to meet flow-by requirements, and lack of adequate storage capacity.

Surface Water Appropriations

Surface water is appropriated by the Maryland Department of the Environment for twelve-year periods. Fort Detrick currently holds a permit to withdraw surface water for its own use from the Monocacy River.

² 2004. Advisory Committee on the Management and Protection of the State's Water Resources. *Appendix D - Monocacy River Watershed - Pilot Study*.



Source Water Protection

The quality of drinking water varies by source. Different issues exist for ground and surface water sources. With the exception of ground water in karst aquifers, which is under the influence of surface water, surface water is more vulnerable to contamination from land use practices. Therefore, water quality concerns like sedimentation, potential spills, and fecal contamination are more prevalent. Ground water quality can be negatively impacted by naturally occurring radon or iron, but can also be contaminated by fecal coliform, particularly when septic systems are nearby.

Common water quality concerns:	
•	Sedimentation
•	Human pathogens
•	Fecal contamination (<i>Cryptosporidium</i> and <i>Giardia</i>)
•	Potential spills
•	Fecal coliforms
•	Nitrates
•	Natural organic matter
•	Algae
•	Taste and odor compounds
•	Gasoline-related compounds

Water quality standards are in place for community systems using ground and surface water. Regular testing of drinking water is a requirement. The federal Safe Drinking Water Act amendments of 1996 require that public systems conduct a Source Water Assessment to better understand the vulnerabilities of their source. The State of Maryland has prepared Source Water Assessments for all public systems in the state, including the Town of Woodsboro. These plans list in detail the vulnerabilities of the supply and offer recommendations for continued protection.

When surveyed, several municipalities in Frederick County reported an interest in increased source water protection through wellhead, springhead or headwater protection ordinances. With ground water wells, springs, and streams often located outside of municipal boundaries, County regulations and ordinances are needed for adequate source water protection of municipal water systems. The Town of Woodsboro supports such actions by the County.

Wellhead Protection

The purpose of wellhead protection is to protect groundwater resources of community public water supplies in order to reduce the potential for ground and surface water contamination. Between 2000 and 2005 the Maryland Department of the Environment (MDE) published a series of assessments for each of the County's community water systems that rely on groundwater. Components of MDE's water supply assessment include:

- Delineation of an area that contributes water to the source
- Identification of potential sources of contamination, and
- Determination of the susceptibility of the water supply to contamination.

Potential sources of contaminants include agricultural activities, gas stations, and industrial uses that store and use various liquids such as gasoline, diesel fuel, and kerosene. The improper use, storage, or disposal, or release of these or other a wide variety of substances from agricultural, industrial, or residential activities can harm groundwater quality. The contaminants may include volatile organic compounds, radionuclides, synthetic organic compounds, microbial contaminants, and nitrates.

In 2007 the County adopted a Wellhead Protection Ordinance, which only applies to the County's jurisdiction. The ordinance established wellhead protection areas for all community groundwater supply systems, amended section of the county code to include new regulations for hazardous substance storage tanks, and prohibited certain land uses and activities within designated wellhead protection areas. Several municipalities have adopted their own wellhead protection ordinances including Middletown, Mt. Airy, Walkersville, Myersville, and Frederick.

Town of Woodsboro Water Service Area

The Town of Woodsboro provides water to 235 customers including nine (9) residential properties outside of the Town boundary on MD 550 and Gravel Hill Road. Most customers are residential households; an elementary school and various commercial establishments are included in the service area. The Town's Industrial Park located on the east side of MD 194 has one commercial business using a well not connected to the Town's system. The Town's system includes five (5) active wells in the Grove Limestone Formation and one inactive well in the Frederick Limestone formation. The Town's average daily water consumption is 70,000 gpd. They are permitted to withdrawal 120,000 gpd (average daily) and 178,200 gpd maximum daily for the month of maximum use.

[Insert map of well locations and wellhead protection areas]

The Town's water supply originates from limestone aquifers and are susceptible to surface water infiltration. Several sources of potential contamination exist in town, which could affect the wells. Wellhead protection areas were delineated by the state in 1997. Another vulnerability to drinking water in Woodsboro is the impact from nearby quarries. The Maryland Department of the Environment (MDE) has established a zone of dewatering influence around the Barrick and LeGore quarries north of Town. Any measurable impact to groundwater wells or households in place before the delineation would be subject to compensation by the quarry owners.

Woodsboro has significant limitations to its drinking water supply. At present, there are less than 10 water service connections available. The town is working with MDE to determine the feasibility of reclaiming drinking water from an inactive quarry. The town also experiences water loss via leaks.

Table
Water Supply System Capacity and Projected Demand (2010-2030)
Based on Expected Rate of Growth (10 D.U.s Per Year)
 (gallons/day)

	2010	2015	2020	2025	2030
Total Dwelling Units	335 DUs	385 DUs	435 DUs	485 DUs	535 DUs
Actual Average Daily Water Usage (2004 Water Use Study)	70,000	-	-	-	-
Total Residential Water Usage (250 gpd x D.U.'s)	83,750	96,250	108,750	121,250	133,750
Total Non-Residential Water Usage (5% of Total Usage)	4,150	4,800	5,450	6,050	6,650
Total Water Usage	87,900	101,050	114,200	127,300	140,400
% Average Daily Withdrawal	73%	84%	95%	106%	117%
Woodsboro's Current Water Withdrawal Limit is 120,000 GPD					

Water Supply Capacity and Planned Growth

Projected Growth of Woodsboro

Projected growth of the Town – through infill development as well as potential annexation - during the next twenty years indicates the need for between 175 and 200 dwelling units, depending upon demographic and household characteristics. For planning purposes, this document assumes the latter number to be the amount of units needed between today and the year 2030.

In terms of water supply capacity, the Town may struggle to accommodate these 200 dwelling units over the twenty-year planning period. After accounting for this planned growth, the Town water supply - at current withdrawal limits - would begin to run short before supplying the 145th dwelling unit. Upon reaching its planned growth limit of 200 dwellings, the current water supply system would have to be operating at 117% of its current capacity.

Total Buildout of 2008 Comprehensive Plan

In a scenario that assumes a complete buildout of all planned annexation areas and all vacant infill parcels (including mixed use zones), the Town is clearly unable to meet the water demands utilizing current withdrawal limits. Additional water supplies would be necessary to address any dwelling units developed beyond the 145 DU's projected by the year 2023.

Water Supply System Constraints on Growth

Generally, the Town of Woodsboro will not be constrained by the withdrawal limits of its water supply system during the next ten to fifteen years. It is only in the years following the turn of the next decade that the Town may find itself unable to grow due to constraints on its water supply. If the town of Woodsboro seeks to grow beyond an additional 150 EDU's, as it has planned in this document, additional sources of potable water will have to be brought online.

Water Conservation

While water consumption by individual households in Frederick County is below the national average, opportunities exist for further reductions in daily water use. Households, businesses, and institutions can reduce consumption by installing water efficient landscaping, rain barrels, low flow bathroom fixtures, gray water systems, and other retrofits to older homes. Widespread education and outreach efforts on the benefits of water conservation are proven to reduce water use in a community and could be used effectively in Woodsboro.

Conservation is especially important during the summer months when demand is high and supplies are low. Peak season water demand management is in place in many local jurisdictions. Middletown, for example, has implemented the use of tiered billing where rates increase with consumption, lawn watering restrictions, and water conservation public alert systems for use during drought. Other communities have investigated or implemented leak detection programs and public education and outreach efforts like handing out free dye tablets to detect leaky toilets, low flow shower heads, toilet dams, and faucet aerators.

Water conservation measures lower consumer rates and utility bills while placing less pressure on precious resources. Communities realize major benefits from conservation measures when its citizens participate. Proven conservation efforts can provide an alternate source of drinking water supply to a community without the need to drill additional wells.

Implementation - Drinking Water Assessment

To achieve water resources goals related to the drinking water assessment, the following policies and action items have been identified. Completion of the action items and adherence to the policy statements will be monitored regularly by the Town through review and update of its Water Resources element, a component of the Woodsboro Comprehensive Plan (2008).

Drinking Water (DW) Policies

- Diversify sources of public drinking water and explore feasible alternatives in order to meet future demand.
- Employ demand management strategies and conservation measures to maximize use of existing water resources.
- Protect the karst (limestone) source of the community's groundwater-based drinking water system.
- Do not support incompatible land uses within designated wellhead protection areas.
- Manage the timing of development within the Town's growth areas based on the adequacy of drinking water supplies.

Drinking Water (DW) Action Items

- Explore, in cooperation with the County, the application of water recharge easements.
- Coordinate with Frederick, Middletown and Walkersville regarding the feasibility of interconnections with the County distribution system for emergency or general situations.
- Develop a water conservation education program for residents and businesses of Woodsboro. Coordinate with Frederick County so as not to duplicate these efforts.
- Support implementation and revisions to the County's Wellhead Protection Ordinance to identify appropriate protection measures for municipal water system wellheads, springheads, and headwater areas that lie outside of their boundaries.
- Conduct an assessment of the availability and reliability of groundwater resources available to the Town. Work with the County on their efforts to do the same.
- Partner with the County on the development of GIS mapping and municipal drinking water data.

Wastewater Treatment Assessment

Community wastewater systems will continue to experience pressure from population and employment growth in Frederick County. As growth pressures place demand on facilities and infrastructure, the state and federal government will place more stringent restrictions on the levels of effluents that are discharged into the County's streams and rivers.

This section of the WRE addresses issues related to wastewater treatment capacity and the discharge of treated effluent. It presents the quality of treated effluent and its impact to water resources; the regulatory framework related to water quality; current and projected demand on community wastewater systems; and the impact of individual septic systems. The section concludes with a list of major issues and potential solutions related to wastewater treatment and disposal as well as recommendations for future policy direction.

Quality of effluent/impact to water resources

Wastewater treatment plants (WWTPs) are point sources of effluent Frederick County. They discharge treated effluent either directly into streams and rivers and in limited cases through land application. The contribution of nutrients (nitrogen and phosphorus) from WWTPs is a major water quality problem facing Frederick County streams and ultimately impacts the Chesapeake Bay.

Frederick County WWTPs discharge to main stem sections of the Monocacy River, Catoctin Creek and the Potomac River as well as their tributaries. The type of treatment required at each WWTP is determined by the ability of the receiving stream to assimilate effluent discharge and the overall impacts to the watershed. The County's major streams have limited ability to assimilate treated effluent due to low flow, seasonal variation in flow, and slow moving stream conditions. Woodsboro's WWTP, along with nine other municipal and county systems, discharges into the Monocacy River Watershed.

Monocacy River Watershed

The Monocacy River is close to reaching its effluent load limitations. The following County and municipal systems have WWTP's that discharge either directly into the Monocacy River or its tributaries:

Municipal Systems

- Emmitsburg
- Frederick
- Thurmont
- Woodsboro

County Systems

- Ballenger/McKinney
- Monrovia
- New Market

- Mill Bottom
- Pleasant Branch
- White Rock

Water Quality Regulatory Framework

As an active participant in implementation of the 2000 Chesapeake Bay Agreement, the State of Maryland has agreed to reduce its nitrogen and phosphorus (nutrient) contributions to the Bay by a specific number of pounds to improve water quality conditions in the Bay. The State's framework for meeting nutrient reduction goals is described in detail in the Tributary Strategies Statewide Implementation Plan. To date, Maryland has made significant progress through upgrades of major wastewater treatment plants to Biological Nutrient Removal (BNR) and Enhanced Nutrient Removal (ENR) treatment technology. These new technologies reduce the overall pounds per year of nitrogen and phosphorus that are discharged from wastewater treatment plants to tributaries of the Bay.

In addition to plant upgrades, Maryland has set nutrient caps on wastewater treatment plants through a point source tributary strategy. New or expanded discharges must meet these permitted limitations. Point sources are required to obtain a National Pollutant Discharge Elimination System (NPDES) discharge permit from the MD Department of the Environment in accordance with federal and state law. The permit specifies the allowable ranges for chemical, physical and biological parameters of discharge. Permits are issued on a five-year planning horizon and set discharge limits for WWTPs.

To meet the rigorous water quality goals of the Chesapeake Bay Agreement, Maryland has set up the Bay Restoration Fund, a dedicated fund financed by individual households and businesses served by community sewerage systems. The Fund is used to upgrade wastewater treatment plants to ENR technology so that they are capable of achieving effluent quality of 3.0 mg/l total nitrogen (TN) and 0.3 mg/l total phosphorus (TP).

Town of Woodsboro Wastewater Treatment Service Area

The Town of Woodsboro, population 961, constructed its sewerage system in 1980 in response to failing septic systems. Initially, the wastewater treatment plant was constructed to serve approximately 650 people. An expansion in 2004 increased the design capacity to 250,000 gpd. In 2005, the average flow to the Woodsboro plant was 82,000 gallons per day. Based upon an average usage estimate of 250 gpd per dwelling unit, the improved WWTP provides capacity for a total of 1,000 sewer connections while, at the present time, there are 438 existing connections to the system. Therefore, development of Woodsboro's growth area is not constrained by sewer service.

The WWTP is a Sequencing Batch Reactor (SBR) system plant located at the end of Council Drive discharging to Israel Creek, a tributary of the Monocacy River. Discharge is approximately 9.5 miles north of the City of Frederick and Fort Detrick water intakes on the Monocacy.

Table
Waste Water System Capacity and Demand
(gallons/day)

	Existing Design Capacity	Current Average Flow	Current Available Gross Capacity	Projected Development (20yrs)	Net Excess (Deficit)	Maximum Develop. Potential (at buildout)	Net Excess (Deficit)
At 100% Design Capacity	250,000	82,000	165,000 660 EDU's	50,000 200 EDU's	115,000 460 EDU's	146,000 584 EDU's	19,000 76 EDU's
At 80% Design Capacity	200,000	82,000	118,000 472 EDU's	50,000 200 EDU's	68,000 272 EDU's	146,000 584 EDU's	(28,000) (76 EDU's)

WWTP Capacity and Planned Growth

Projected Growth of Woodsboro

Projected growth of the Town – through infill development as well as potential annexation - over the next twenty years indicates the need for between 175 and 200 dwelling units, depending upon demographic and household characteristics. For planning purposes, this document assumes the latter number to be the amount of units needed between today and the year 2030.

In terms of wastewater treatment capacity, the Town is well-positioned to accommodate these 200 dwelling units over the twenty-year planning period. After accounting for this planned growth, the Town WWTP facilities would maintain a healthy design capacity of approximately 460 DU's. This growth can be handled even with the treatment plant operating at 80% capacity or being constrained by other such equivalent limitations which would reduce the overall effectiveness of the facilities such as future I&I problems or increased TMDL limits.

Total Buildout of 2008 Comprehensive Plan

In a scenario that assumes a complete buildout of all planned annexation areas and all vacant infill parcels (including mixed use zones), the Town is left with little remaining WWTP capacity (19,000 gpd). At the 80% Design Capacity level, the WWTP facilities fall short of providing adequate capacity for complete buildout, missing the mark by approximately 76 EDU's.

WWTP Constraints on Growth

Generally, the Town of Woodsboro will not be constrained by the design capacity of its WWTP facility during the next twenty years, even if explosive rates of growth result in a complete buildout of the town's planned growth area. However, the Town should be vigilant and proactive

in maintaining the health of the system to ensure that I&I and nutrient loading issues do not constrain Woodsboro's ability to grow as planned in the next generation.

Major Wastewater Issues

Inflow and Infiltration (I&I)

Inflow and infiltration pose major challenges to community sewerage systems. Inflow of storm water through sump pumps and downspouts into sewer pipes and infiltration of groundwater through leaky pipes introduce large amounts of clean water to the sanitary sewer system causing overflows and an increase in the amount of water to be treated. These conditions can cause overflow where raw sewage bypasses the treatment facility and is discharged directly into a stream. Overflow places public health at risk and violates state and federal water quality regulations.

The per household average daily flow into the Woodsboro WWTP stands at approximately 255 gpd (90 gpd/person). This would seem to indicate minimal inflow and infiltration issues across the system.

Water Quality

Frederick County's major streams – Catoctin Creek and the Monocacy River – have limited assimilative capacity for pollution. TMDL's are forthcoming, which will set waste load allocations to meet local water quality standards. Permitted point source effluent load limits (from WWTPs) have been reached on Catoctin Creek and are unlikely to be raised. Similar restrictions exist on the lower section of the Monocacy River near Frederick City.

Septic systems are often located in soils that are poor with infiltration problems resulting in nutrient pollution to local streams. Failing septic systems negatively impact groundwater quality.

Implementation - Wastewater Assessment

To achieve water resources goals related to the wastewater assessment, the following policies and action items have been identified. Completion of the action items and adherence to the policy statements will be monitored regularly by the Town through review and update of this Water Resources Element, a component of Woodsboro's Comprehensive Plan (2008).

Wastewater (WW) Policies

- *Promote measures to reduce inflow and infiltration into the Town's wastewater collection system.*
- *Coordinate with Frederick County to evaluate solutions that ensure future wastewater capacity and adequate management planning.*

- *Where feasible as part of wastewater treatment plant improvements, exceed state and federal regulatory requirements.*
- *Recognize and support the use of new septic system technologies and the use of alternatives to septic systems on County lands impacting Woodsboro's drinking water and wastewater treatment systems. .*

Wastewater (WW) Action Items

- *Explore funding sources and programs to address inflow and infiltration problems in the Town's wastewater system.*
- *Review growth rates and wastewater flow rates annually to assess accuracy of planning estimates and to adjust land use policies if necessary.*

Managing Storm Water and Non-Point Source Pollution

The use of land for development, industry, transportation and agriculture contributes non-point source pollution to our streams and watersheds. Land disturbance and conversion tend to exacerbate impacts, while forest and wetland protection maintain or improve watershed health and function. Woodsboro's Comprehensive Plan addresses non-point source pollution through growth management policies – coordinated with Frederick County's Comprehensive Plan policies - that limit new development to identified community growth areas as well as through the identification and protection of natural resources and green infrastructure.

This section of the Water Resources Element provides a programmatic assessment of the County's Stormwater Management Program since the Town of Woodsboro relies heavily upon the County's regulatory oversight of stormwater practices and facilities within the municipality.

Non-point Source Pollution

Non-point source pollution is transported to surface and ground water as a result of run off from lawns, parking lots, roofs, and fields during rain storms. Stormwater transports sediment, nutrients, fertilizers, bacteria, heat, salt, oil, grease and other contaminants across the land to local streams and water bodies. On naturally vegetated (forests, meadows) and agricultural lands, stormwater permeates the soil and many pollutants are captured and filtered. Healthy streamside buffers and forest stands are particularly effective in this function. In developed areas, where much of the landscape is impervious (rooftops, driveways, parking lots, compacted or clay soils, and roads) direct ground water recharge is impeded and the volume of stormwater runoff into streams increases.

Non-point source pollution is detrimental to water quality and wildlife habitat and in our region and its cumulative impacts are degrading the Chesapeake Bay. Since land use conditions affect the amount and extent of non-point source pollution, future development patterns should take into account their potential impact in order to protect the County's streams and the Chesapeake Bay. The following section includes two analyses aimed at connecting land use planning with non-point source pollution. The first is an assessment of Frederick County's current levels of imperviousness; the second presents the potential nutrient pollution (a form of non-point source pollution) that could result from build-out of the County's land use plan.

Impervious Cover

Overall watershed imperviousness has been linked to a wide range of negative impacts to stream hydrology, stream morphology, biological habitat, and water quality. Research reveals that when impervious cover within a watershed exceeds about 10 percent, sensitive stream elements are lost. In cold-water regions supporting native brook trout reproduction, imperviousness of greater than 1 percent results in the loss of brook trout population. Once imperviousness reaches 25 to 30 percent, studies show that most indicators of stream quality

shift to a poor condition as a result of severe impacts from erosion, channel instability, severe habitat degradation and decreasing biological integrity.

The County's land use plan map was analyzed to determine which watersheds were reaching or exceeding the 10% and 25% thresholds. For each of the County's twenty sub watersheds, the total acreage in each land use plan designation was calculated with a rate of impervious cover then applied. These rates were provided by the Maryland Department of Environment. The table below summarizes the estimated percent impervious cover by watershed.

Estimated Percent Impervious Cover, by watershed (2008)			
Watershed	% Impervious	Watershed	% Impervious
Ballenger Creek	18.3	Lower Bush	9.4
Bennett Creek	6	Lower Linganore	7.1
Carroll Creek	26.5	Middle Creek	2
Catoctin Creek	3.7	Monocacy Direct	4.2
Fishing Creek	3.6	Potomac Direct	6
Glade Creek	4.7	Owens Creek	2
Hunting Creek	3.8	Toms Creek	3.6
Israel Creek	4.1	Tuscarora Creek	9.1
Little Catoctin	6	Upper Bush Creek	11.2
Little Pipe	1.1	Upper Linganore Creek	2.3

As expected, developed watersheds, such as Carroll Creek and Ballenger Creek, which include the City of Frederick, had the greatest level of impervious cover at 26.5% and 18.3% respectively while more than half of the County's watersheds (11) had impervious cover less than 5%. Woodsboro sits in the Glade Creek and Israel Creek watersheds which are highlighted in the table above. Efforts should be made to maintain these low values within any individual watershed, while understanding that concentrated growth in designated growth areas – like Woodsboro and other municipalities in Frederick County – will necessarily, and intentionally, result in a localized increase in impervious surface cover.

Nutrient pollution

Excessive amounts of nutrients, particularly nitrogen and phosphorus, are the main cause of the Chesapeake Bay's poor health.³ Nutrient pollution leads to algal growth and oxygen depletion, which create an uninhabitable environment for most aquatic life. Similar to the impervious cover analysis, the County's current land use plan was evaluated to determine its impact of land use on nitrogen and phosphorus pollution.

The methodology was provided by MDE and incorporated loading rates by very generalized land use/cover categories derived from the Chesapeake Bay Program Watershed Model (Phase 4.3) for the Potomac River basin. Estimated septic system loads for residential and non-residential

³ 2008. Chesapeake Bay Program web site. <http://www.chesapeakebay.net/nutrients>. "Nutrients".

development are included in the data. For the current conditions the land use/cover is derived from high altitude photography and satellite imagery as of 2002. Generally, only land uses greater than 10 acres in size are identified. The Tables below compare the nitrogen and phosphorus loads based on the current land use/cover conditions and with the build out conditions of the County's land use plan.

Table: Nitrogen Loading Summary			
Land Use/Cover	Current (lbs/year)	Future (lbs/year)	Change (lbs/year)
Development	428,918	1,055,798	626,880
Agriculture	2,520,798	2,088,181	-432,616
Forest	292,832	176,298	-116,534
Water	23,433	18,802	-4,631
Other	70,286	188,985	118,699
Total Terrestrial Load	3,336,267	3,528,065	191,798

Residential Septic (edus)	485,802	615,231	129,428
Non-residential Septic (edus)	18,439	21,395	2,956
Total Septic Load	504,242	636,626	132,384
Total NPS Nitrogen Load	3,840,509	4,164,691	324,182

Table: Phosphorus Loading Summary			
Land Use/Cover	Current (lbs/year)	Future (lbs/year)	Change (lbs/year)
Development	38,062	96,618	58,556
Agriculture	260,301	211,802	-48,499
Forest	3,211	1,933	-1,278
Water	1,625	1,304	-321
Other	6,407	17,319	10,912
Total NPS Phosphorus Load	309,606	328,976	19,370

In future long range plans, the Town of Woodsboro hopes to have at its disposal more specific watershed and sub-watershed data in order to better understand and mitigate stormwater impacts on water resources. In the meantime, it is the general assumption that any impacts from development occurring on undeveloped land within the Woodsboro's Community Growth Area would likely be off-set by the conversion of those currently farmed parcels out of agricultural use.

Frederick County's Stormwater Management Program

Frederick County first adopted stormwater management (SWM) regulations in 1984 and maintains its current program in accordance with Environmental Article, Title 4, Subtitle 2 of the Annotated Code of Maryland. The purpose of the County's program is to protect and maintain the public health, safety, and general welfare by establishing minimum requirements and procedures to control and minimize the impacts associated with increased stormwater runoff. Conversion of land for the development process alters the hydrologic cycle

and impacts watershed health. After trees are cut and land is cleared for the construction process, buildings and infrastructure are developed. Rooftops, sidewalks, roads, driveways, and even grass-covered yards are considered impervious surfaces, when compared to the vegetated, undeveloped landscape that they have replaced. In an urban/suburban environment, when rain falls, it runs off of impervious surfaces, gaining heat and picking up oils, fertilizers, sediments, and other pollutants that are transferred to local waterways through curb and gutter systems, enclosed storm sewers, and lined channels. This polluted discharge affects water quality and the health of aquatic life downstream.

Proper management of stormwater runoff minimizes damage to public and private property, controls stream channel erosion, reduces local flooding, and maintains after development, as nearly as possible, the predevelopment runoff characteristics.

The County implemented the policies, practices, principles, and methods of the *2000 Maryland Stormwater Design Manual* through the County's Stormwater Management Ordinance and its Design Manual in 2001. The Board of County Commissioners adopted the County's *Storm Drainage and Stormwater Management Design Manual* in 2003.

The County continues to work with the development community to implement the goals of the *2000 Maryland Stormwater Design Manual*. The County will also continue to educate both the development community and the general public in ways to determine the proper type of design for site-specific areas, as well as in facility installation timetables and maintenance issues.

House Bill 786 – Stormwater Management Act of 2007

Currently, developers are subject to stormwater management laws that require sediment fencing, construction of stormwater management ponds, and other best management practices. In 2007, the Maryland General Assembly passed legislation (House Bill 786), which will ensure developers control runoff from construction sites and use low impact development design to better manage stormwater. Enhancements will continue to be made as the manual is updated to comply with the Stormwater Management Act of 2007.

Frederick County adopted new interim stormwater regulations in May 2010 to address the new legislation. These new rules will be utilized on all new, previously unapproved projects in the County, including within the Town of Woodsboro.

Watershed Restoration Efforts

The County approaches watershed restoration through new stormwater management ponds, stormwater management pond retrofits, Low Impact Development (LID), stream restoration/bank stabilization, and buffer enhancement. These approaches include a myriad of techniques. For example, LID techniques include rain gardens, bio-filtration swales, and tree boxes.

The County tracks all restoration projects for the purpose of regulatory compliance and reports on them in its National Pollutant Discharge Elimination System, Municipal Separate Storm Sewer System (NPDES MS4) Annual Report. Monitoring results, community outreach efforts, management programs, and overall watershed health and progress are tracked.

The Chesapeake Bay Agreement (1983), which established the Chesapeake Bay Program, initiated many of the comprehensive efforts regionally to protect and restore watersheds. With the Chesapeake 2000 agreement (C2K), new goals were set to improve water quality and wildlife habitat throughout the Bay watershed. Some of the County's recent efforts include:

- Completion of Upper and Lower Monocacy River Watershed Restoration Action Strategies;
- Adoption of a Countywide Stream Buffer Protection Ordinance;
- Initiation of routine stream monitoring in three highest priority watersheds;
- Coordination of the Monocacy-Catoctin Watershed Alliance; and
- Extensive public education and outreach (conferences, fairs, workshops, videos, fact sheets).

Many opportunities exist to educate citizens and business owners that water is a limited natural resource fundamental to healthy, sustainable communities, both human and biological. Water conservation, low impact development, water reuse, and the reduction of water use during summer months (or peak demand management) are examples of tools the Town can promote to maintain the quality and quantity of the water resource and ensure it is available for our needs in future years.

Monocacy River Watershed Restoration Action Strategies (WRAS)

With the assistance of a diverse group of partners, the Frederick County Division of Public Works - Watershed Management Section developed a watershed restoration plan for the Monocacy River. Strategies for restoring the health of Israel Creek and Glade Creek are included in these plans.

The WRAS concept is an element of the Clean Water Action Plan, a federal initiative to guide states in renewed efforts to restore and protect their water resources. With support from state agencies, local stakeholders met over a multi-year period to identify the causes of water pollution and resource degradation in the Monocacy River watershed and provide specific action items to address the problems.

This was the first coordinated data collection and interpretation effort for the Monocacy watershed and its sub-watersheds like Israel Creek and Glade Creek. In addition to prompting the publication of much-needed benchmark technical reports, the WRAS initiated the Monocacy-Catoctin Watershed Alliance (Alliance), a citizen based stakeholder group charged with implementing the action items. In the Glade Creek watershed, the Alliance has installed watershed signs that alert travelers as they enter and exit the Glade Creek watershed area. Other projects in the region have included schoolyard habitat restoration projects, stream buffer tree plantings, wetland mapping, rain garden construction, and various clean-up efforts.

Implementation

To achieve water resources goals related to managing storm water and non-point source pollution, the following policies and action items have been identified. Completion of the action items and adherence to the policy statements will be monitored regularly by the County through review and update of the Water Resources Plan, a component of the County's Comprehensive Plan.

Stormwater (SW) Policies

- *Encourage innovative technologies for storm water management.*
- *The protection of ground and surface water quality shall be an important factor in the approval of residential and non-residential development.*
- *Minimize impervious cover within residential and non-residential development in order to reduce storm water runoff.*
- *Construction of new municipal facilities will maintain or improve existing surface and ground water quality.*
- *Integrate watershed planning and management in the comprehensive planning process.*
- *Encourage and support research on and monitoring of local ground water conditions, aquifer recharge, watersheds and streams.*

Stormwater (SW) Action Items

- *Cooperate with the County in developing a GIS database to refine methods for calculating impervious cover to provide baseline data and aid in prioritizing restoration efforts.*
- *Incorporate the use of non-structural storm water management best practices (vegetated swales, rain gardens, cooling buffers and bio-retention) with maintenance and monitoring agreements.*
- *Reduce regulatory barriers to implementation of low impact development measures and create incentives to facilitate their use where appropriate.*
- *Showcase examples of low impact development and environmental site design techniques to increase public awareness of best practices.*
- *Encourage the amendment of County ordinances to reference stormwater management best management practices and implement the 2007 Storm Water*

Management Act guidelines insomuch as they reflect the need to allow for the full and appropriate development of municipal growth areas such as Woodsboro's .

- *Support implementation of the Lower and Upper Monocacy River Watershed Restoration Action Strategies (WRAS) and the Maryland Chesapeake Bay Tributary Strategies.*
- *Support development of a monitoring system of local ground water conditions, aquifer recharge, watersheds and streams in the vicinity of the Town.*
- *Support retrofits and stream restoration projects in the Israel Creek Watershed (identified for funding in the County's FY 2010-2015 CIP).*

Chapter 9

Municipal Growth & Land Use

This chapter satisfies the requirements of House Bill 1141 related to the new Municipal Growth Element. The chapter includes a map of the Town of Woodsboro's municipal growth area and future annexation limits. The chapter begins with a discussion of Woodsboro's growth trends and patterns, offering information related to Woodsboro's existing development pattern and recent growth activity.

A section entitled, Existing Land Inventory, presents rezoning and annexation cases followed by an analysis of Woodsboro's use of land within the various land use designations and zoning districts. This analysis offers a comprehensive look at Woodsboro's current supply of vacant, undeveloped land. The next section, Determining Woodsboro's Future Land Needs, discusses local and regional population projections and assesses how much land will be needed to provide for development over the next twenty years.

Growth's impact on community facilities is discussed in the following section. Its impact on schools, libraries, public safety, water and sewer facilities, stormwater management, and recreation are highlighted. The chapter concludes with a set of policies and implementation items related to municipal growth and development.

Municipal Growth Goals

- Manage the rate of growth to be consistent with the provision of adequate services and infrastructure.
- Continue to coordinate annexation plans and comprehensive planning efforts with Frederick County government.

Growth Trends and Patterns

Background

The Town of Woodsboro adopted its first Comprehensive Development Plan in 1973, which provided a guide for the location of future land uses within the Town's jurisdiction. To implement the land use plan, the Town established zoning districts, which offered property owners regulations directing the type, density, and timing of new development.

The Town currently enforces a Zoning Ordinance and associated Subdivision Regulations. The Planning and Zoning Commission provides development review for the Town. The Burgess and Commissioners are responsible for negotiating public improvements and providing assurance that adequate services and infrastructure are available. The Town has an

assuming access is provided.

The largest concentration of public land is the Town's Community Park located on MD 550 on the east side of MD 194. There is also a small memorial park downtown and the elementary school grounds at the corner of Second Street and Liberty Road serve resident's recreational needs.

The predominant land uses surrounding the Town of Woodsboro include agricultural and rural uses and mineral mining. While limited development may occur in the County's designated agricultural/rural land use areas, in the vicinity of Woodsboro, 638 acres of farmland have either sold or donated their development rights as part of agricultural preservation programs. The largest of these, the 219-acre Hildebrand Farm, is located along the Town's western border, restricting future annexation/development potential. These areas are delineated on the preceding Existing Land Use map.

Other land use constraints include the Barrick/Le Gore quarry to the north and the Lehigh Portland Cement quarry to the east of town. The Barrick/Le Gore quarry added two adjacent properties to their holdings/operations in 2006. Representatives of the corporation estimated that their existing pre-2006 holdings have a life span of 100 years. No plans for future mining or reclamation were discussed.

Growth Activity

With little development potential in Woodsboro, the focus of current land use activity is infill and redevelopment. At the 2000 Census, there were 298 housing units within town limits. Only sixteen units were added between 2000 and 2005. Figure 4 shows the number of housing units constructed over the twenty-year period of 1985 to 2005. From 1988 to 1999, the Town averaged 19 new dwellings per year compared to an average of less than one dwelling per year in the early 1980s. With the completion of Copper Oaks construction activity, housing construction slowed in 2000, as there was no additional vacant land available for new construction.

Since 2000, development of a few individual lots has occurred. The project generating the majority of recent permits is the Woodbury Subdivision, located on the old Woodsboro Livestock Auction property. This 14-acre property was approved for 37 single-family dwelling units in 2005 and accounts for most of the town's recent construction activity.

Table 9 provides a summary of the residential subdivision development pipeline for properties located in the Town of Woodsboro. The term residential subdivision development pipeline is used to describe the process by which subdivided lots are approved through the planning process, recorded, and/or permits issued for construction of housing units on that parcel of land. In the Town of Woodsboro, the Planning and Zoning Commission has approved seventeen total lots accounting for eleven new water tap allocations. The remaining six parcels have existing structures on them at present.

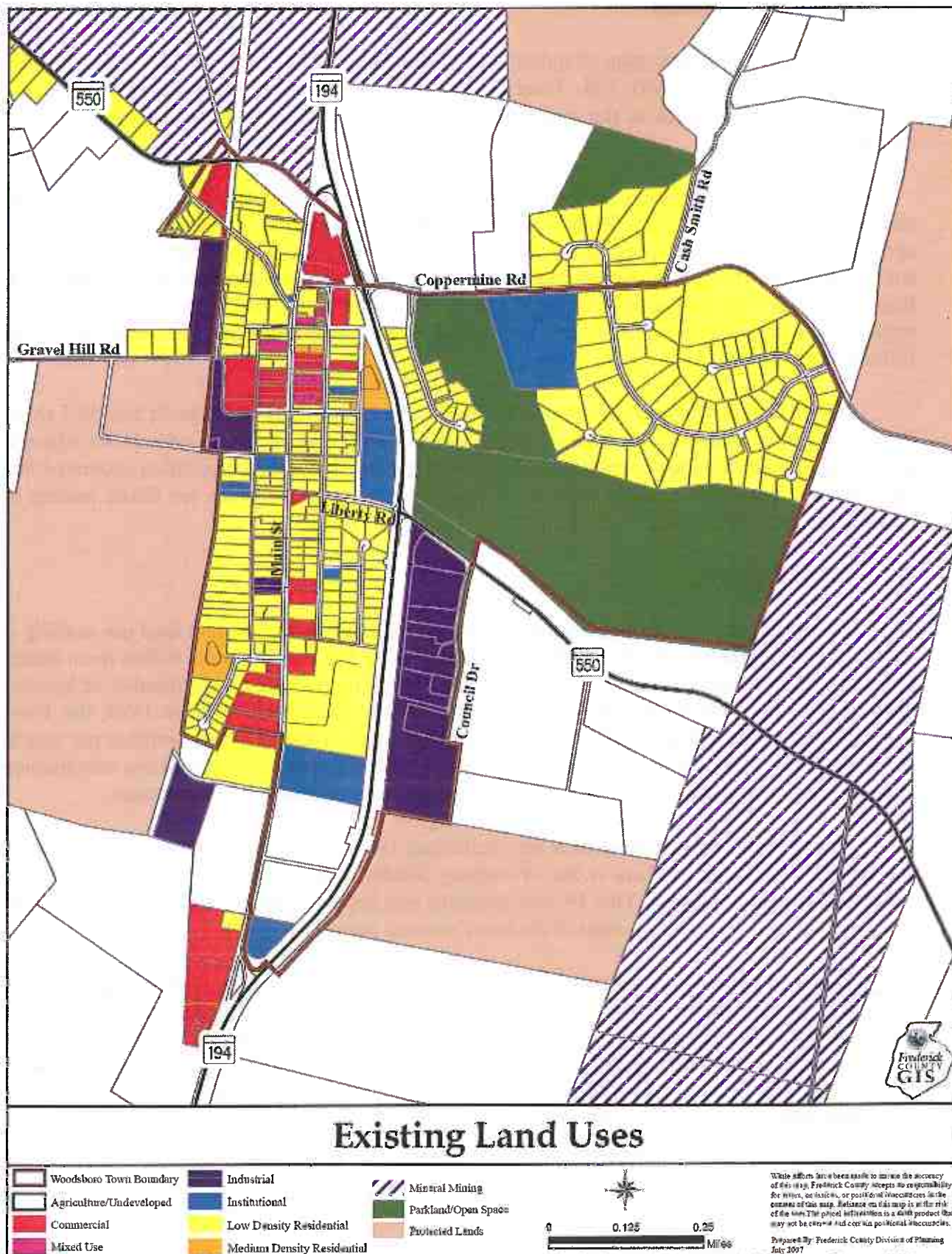
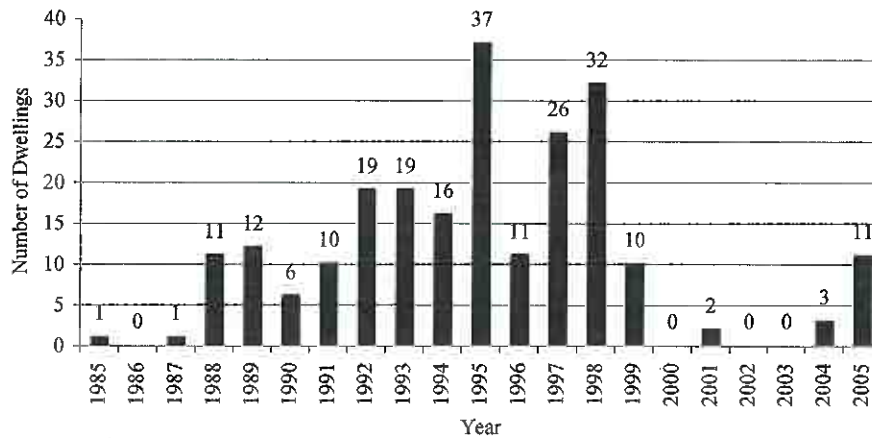


Figure 4: Housing Unit Construction Activity

Town of Woodsboro

**Table 9: Residential Subdivision Development Pipeline Summary**

Town of Woodsboro

(active projects)

Name	Total Lots Approved (1)	Water Tap Allocations (2)	Recorded Lots (3)	Total Lots Available	Building Permits Issued	Recorded Lots Available	Unrecorded Lots Available
Grimes-Powell-Flickinger's Subdivision	4	2	4	2	1	1	0
Nicole Rae Subdivision	6	5	6	5	0	5	0
James Street Extended	3	2	3	2	2	0	0
Eaves Subdivision	2	1	1	0	0	0	0
Total	15	10	14	9	3	6	0

Notes: (1) Received Final Plat approval by the Planning Commission. (2) Number of taps to be requested by subdivider. (3) All fees paid. Lots recorded with Courthouse.

There is one subdivision pending final plat approval; the Copper Oaks II project, on the former Lawson property, proposes 13 lots off of Coppermine Road, adjacent to the Copper Oaks subdivision. Two recent annexations have not yet entered the subdivision process. The 2.54-acre Phoenix-Coppermine property and 0.876 Phoenix-Main property were annexed in 2005 with a maximum subdivision potential of three lots each.

Issues Related to Growth Trends and Patterns

There are a variety of issues affecting Woodsboro's future growth potential. As discussed, future growth and annexation in Woodsboro is restricted by adjacent agricultural preservation easements and mineral mining activities. These areas limit the direction of future

growth beyond the current municipal boundary. Concurrently, there is a very limited opportunity for infill development on vacant land within the current municipal boundary. A land utilization analysis is performed later in this chapter to assess whether the Town's supply of vacant land is adequate to serve the projected population.

With the exception of one vacant parcel, the existing Industrial Park is built out and there are no other industrial areas designated within the Town limits. The Town will need to determine whether they want additional land planned and zoned for employment uses and if so, where is an appropriate location for this type of use.

Regional growth pressures will affect the Town of Woodsboro over the twenty-year planning period. If there is not adequate land designated either within town limits or as part of an annexation, surrounding agricultural and rural areas and nearby municipalities may receive increased development pressure.

Existing Land Inventory

This section begins with a discussion of rezoning and annexation activity since the 1973 Plan adoption. The bulk of the section is a detailed land utilization analysis, which assessed whether there is adequate land planned and zoned for residential and employment uses under the current land use plan and zoning map for the Town of Woodsboro.

Re-zonings & Annexations since 1973

Rezoning activity has been light with eight requests approved since 1976 for a total of approximately 21 acres. The majority of rezoning approvals, twelve acres, were to the R-1 Low Density Residential District. The other rezoning approvals were for R-2 Medium Density Residential and CBD Central Business District zoning. Two of the cases were limited comprehensive re-zonings involving entire blocks of North 2nd Street; these cases resolved split zoning issues on individual parcels in that portion of downtown.

Annexation activity has been more frequent. Since the Town's first comprehensive plan was completed, Woodsboro has annexed approximately 340 acres of land. A map detailing those properties annexed since 1973 follows. Table 10 lists annexed properties and includes brief descriptions of their size and location. The R-1 Residential Zoning District grew most substantially in acreage, followed by the Open Space District. The properties responsible for this growth in acreage were the Copper Oaks subdivision and the Woodsboro Community Park.

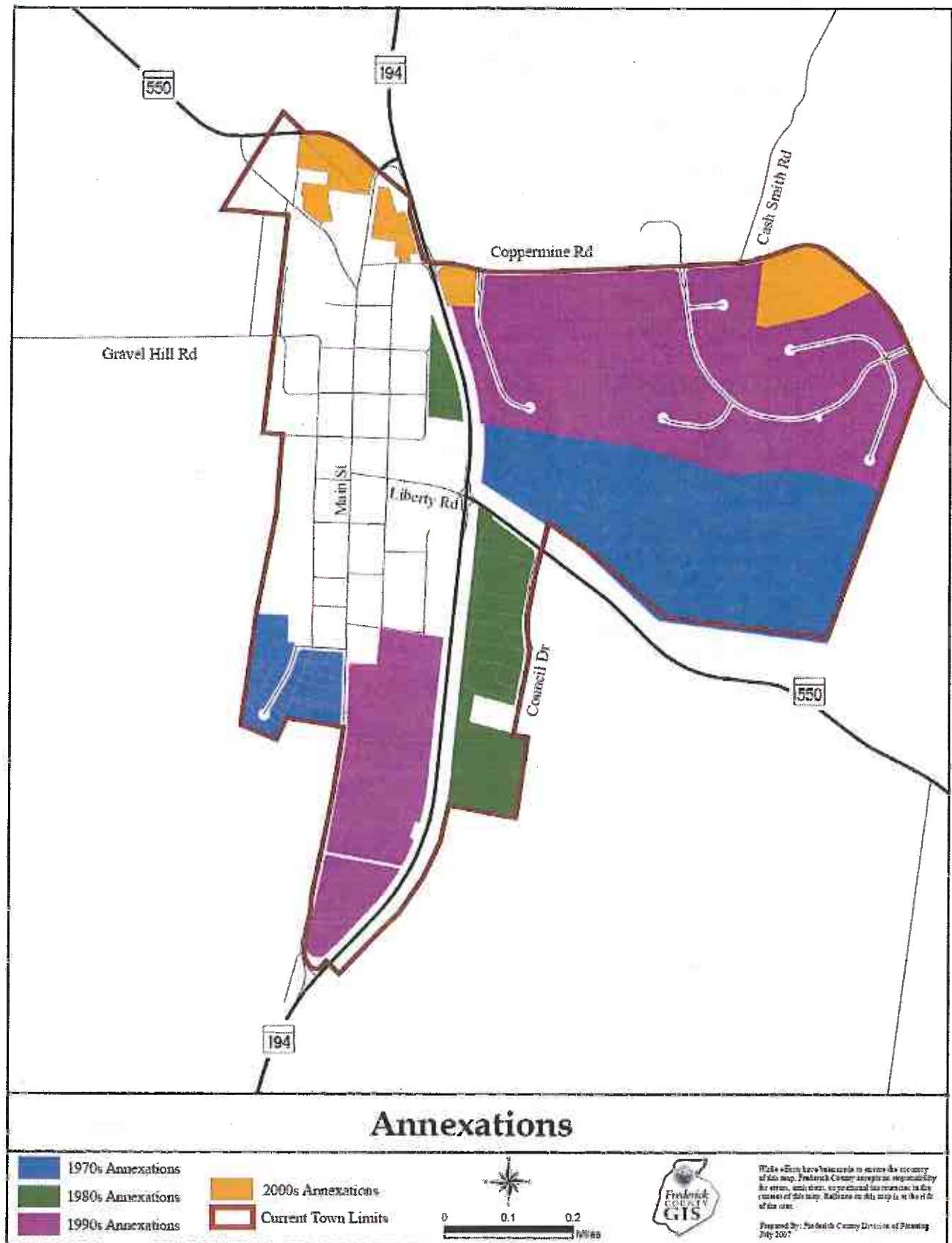


Table 10: Annexation Data Town of Woodsboro (1973 – present)		
Applicant/Location	Acreage & Zoning	Date Annexed
Woodsboro Community Park	87.254 acres, OS	Early to mid 1970s
Various property owners on southwest end of Woodsboro	34.9 acres, R-1 and B-1	1978
Kirkpatrick/Industrial Park	26.758 acres, IP	1980, 1982
Woodsboro Fire Company	3 acres, R-1	1982
Comstock/Copper Oaks	118 acres, R-1 and OS	1990
Woodsboro Livestock & Sales Inc.	14.65 acres, B-1	1995
Mack/Godberson/Mt. Hope	36.4 acres total; B-1, IP, OS	1999
F&M Bank/Medical Center	3.39 acres, CBD and HS	2002
Advanced Consulting Company, LLC/James Street Extended	0.2190 acres, R-1	2004
Phoenix, Inc./SE corner of intersection of MD 194 and Coppermine Road	2.54 acres, R-1	2005
Phoenix, Inc./Main Street behind High's Store, south of MD 550 relocated	0.876 acres, R-1	2005
Lancaster Craftsmen Builders, Inc./Lawson Property	10.05 acres, R-1	2005

Vacant Land Inventory

An inventory of vacant land helps to determine whether there is an adequate supply of land available to serve the residential, commercial and industrial needs of a growing community. The following analysis used Geographic Information Systems (GIS) and aerial photography to determine where vacant land exists within the current town limits. The development potential of Woodsboro's vacant land is offered, using the current 2007 zoning classifications.

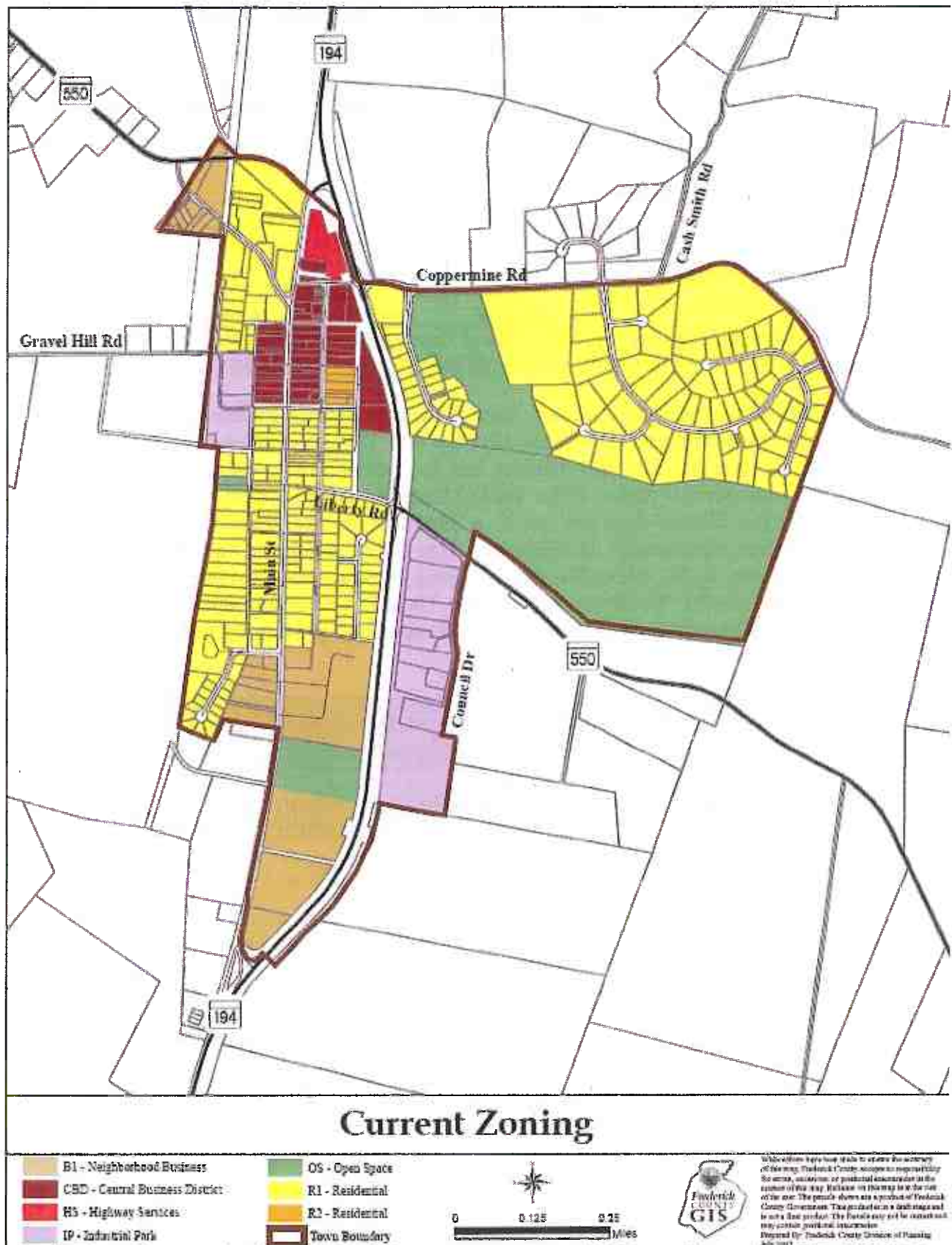
Residential Land

The Town's Comprehensive Zoning Map (2007) identifies 235 acres of land zoned for residential uses (see Table 11). Of those, 209 acres or 90% have been developed. There is no available land in the R-2 Medium Density Residential District and only 1 undeveloped acre in the CBD Central Business District. The B-1 Neighborhood Business District (B-1) identifies 15 acres available for development; however the B-1 District permits commercial and residential development. There is no assurance that this parcel will be developed as a residential project. Finally, the R-1 Low Density Residential District has 10 acres available for development.

Table 11: Vacant Land Inventory - Residential Zoning Town of Woodsboro (2007)				
Zoning Classification	Total Acres Zoned	Total Acres Developed	Acres Undeveloped	% Land Developed
<i>R-1 Low Density Residential</i>	176	166	10	94%
<i>R-2 Medium Density Residential</i>	2	2	0	100%
<i>B-1 Neighborhood Business</i>	40	25	15 ¹	64%
<i>CBD Central Business District</i>	17	16	1	94%
Total	235 acres	209 acres	26 acres	90%
Source: Woodsboro Zoning Map, 2007. Frederick County Mapping and Data Services, 2007.				
1. The 15 acres of undeveloped B-1 zoning could be developed entirely as a commercial project.				

Under current residential zoning, there is the potential for a maximum of 124 additional housing units in Woodsboro (see Table 12). The R-1 District could support 38 single family detached housing units. The B-1 District has the potential to support 76 housing units if developed as a residential project under the R-2 District conditions (6,000 square foot minimum lot size). The B-1 District does not specify a minimum lot size. Since the B-1 District allows residential and/or commercial development, there is no assurance that the land would be developed one way or the other. The district's projections assume development as a residential project, like the nearby Woodbury subdivision. There is no housing unit potential in the R-2 District. The CBD has one vacant acre that could support up to 10 multi-family housing units in a single structure.

Table 12: Potential Build-out, Residential Zoning Town of Woodsboro (2007)			
Zoning Classification	Existing Housing Units (HU)	Additional Potential HU¹	Total HU
<i>R-1</i>	257	38	295
<i>R-2</i>	6	0	6
<i>B-1</i>	46	76 ²	122
<i>CBD</i>	76	10	86
Total	385 units	124 units	509 units
Source: Woodsboro Zoning Map, 2007.			
1. Additional potential housing units based on development of 70% of the total acreage at maximum allowable density under current zoning.			
2. Assumes 100% build-out as residential rather than commercial development.			



Commercial and Industrial Land

The 2007 Zoning Map identifies 95 acres for commercial and industrial uses (see Table 13). Of that, 66 acres or 70% has been developed. As mentioned above, there is 15 acres in the B-1 District and 1 acre in the CBD that could be developed as a residential or commercial project. If these parcels were developed residentially, there would be no vacant land within town limits with commercial zoning.

The vacant land zoned IP is located within the existing Industrial Park on Council Drive. There appear to be access issues with the largest vacant parcel at the Industrial Park. About three acres is identified as having IP zoning, but is located within road right of ways and therefore has no future planned industrial use.

Table 13: Vacant Land Inventory - Commercial/Industrial Zoning Town of Woodsboro (2007)			
Zoning District	Total Acreage Zoned	Total Acreage Developed	% Land Developed
Commercial (B-1, CBD, HS)	60	44	73%
Industrial (IP)	35	22	63%
TOTALS	95 acres	66 acres	70%
Source: Woodsboro Zoning Map, 2007			

Determining Woodsboro's Future Land Needs

This section includes a discussion of Woodsboro's projected population; the land needs to accommodate the projected population; the recommended direction of new growth to the Town; and the designation of a municipal growth boundary and future annexation area.

Population Projections

Regional

Across the Walkersville Region, of which Woodsboro is a part, population projections estimate that 32,929 people will reside in the area by the year 2025¹. That amounts to an increase in population of 8,613 from the 2005 population of 24,316. This level of population growth assumes an average increase of 431 new residents each year. Between 1980 and 2005, population growth to the Walkersville Region averaged 379 people per year.

In the past, approximately 45% of the Walkersville Region population resided within one of three designated growth areas: Walkersville, Woodsboro and Libertytown. The remaining

¹ Walkersville Region Plan, 2006.

population lived in the region's agricultural and rural areas or within rural subdivisions outside of growth areas developed prior to State/County Smart Growth policies. If that trend were to continue, 194 people per year would be moving into the three growth areas and 237 would be moving to areas outside of the growth areas.

The Town of Walkersville states in their most recent long-range plan that they anticipate an average growth rate of 40-50 new homes per year. Assuming Walkersville's average household size of 2.9 persons per dwelling unit, they would account for between 116 and 145 new residents per year. The remaining 49-78 people would be distributed between Woodsboro and Libertytown.

Woodsboro

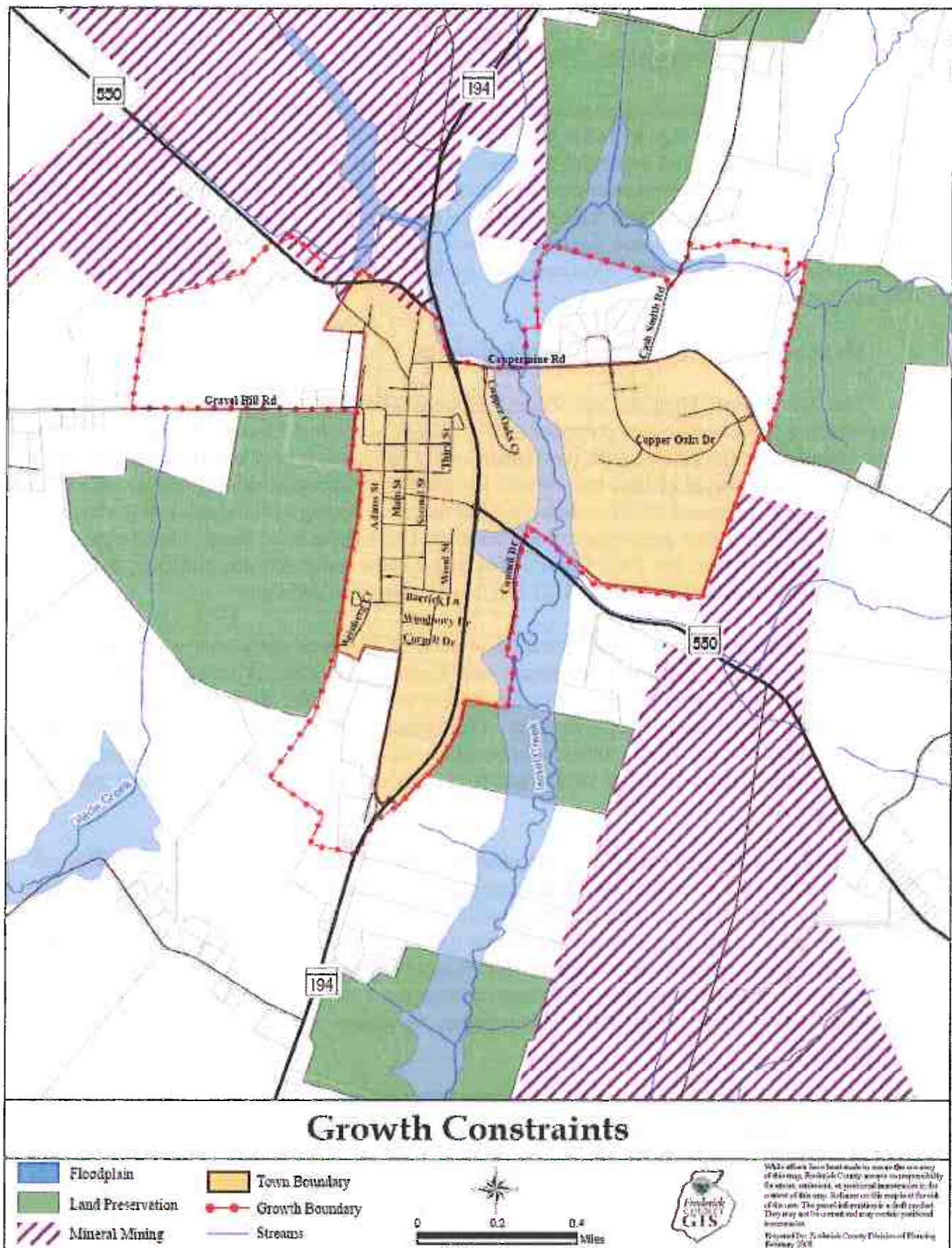
As discussed in Chapter 3: Background, Woodsboro's population is driven by the availability of vacant land for development, the permitting and construction process, and the availability of housing. Over the years, the Town's population has spiked with individual development projects. Given the regional projections, population growth is expected in Woodsboro if there is land and housing available. Water resources will affect Woodsboro's population growth; currently the Town has limited water allocations available from the MD Department of the Environment. Using the Census data from Chapter 3, Woodsboro's population grew by an average of 27 individuals per year between 1990 and 2005. If this trend continues, it is projected that 540 new people will reside in Woodsboro in 2027 for a total projected population of 1,452.

Land Needs to Accommodate Population

To accommodate 540 new people and based on Woodsboro's average of 3.1 persons per household, the Town will need approximately 175 new housing units. Assuming a mix of housing type and density, 63 acres of land will be required for construction of 175 housing units. These estimates assume that 70% of the land will be developable and that 105 housing units would be developed at 3.5 units per acre (Smart Growth density target) and the remaining 70 housing units would be developed at 5 units per acre, the maximum yield in Woodsboro's R-1 Low Density Residential District. Woodsboro's residential districts allow for higher densities associated with other housing types. However, historically, subdivision development in the town has tended to gain approvals at the lower end of density ranges.

Constraints to Growth

As mentioned earlier in this chapter, Woodsboro's growth is restricted to the west/southwest, north, and east due to properties in permanent agricultural preservation and/or mineral mining operations. The Israel Creek floodplain, which runs in a north-south direction east of MD 194 is also a limiting factor. Therefore, the only feasible directions for future expansion of the community is to the northwest along Gravel Hill Road/MD 550, to the east on Coppermine Road, and to the south along MD 194. A Growth Constraints map located on the following page delineates each of these limiting factors.



Designation of a Municipal Growth Boundary and Future Annexation Area

Municipal Growth Boundary - Walkersville Region Plan

The Frederick County Comprehensive Plan (2010) delineated a Municipal Growth Boundary for Woodsboro that includes less than 150 acres of undeveloped residential land, 46 acres of undeveloped limited industrial land, and 28 acres of undeveloped land designated for general industrial uses. These acreages include: the Orren Stein property between Gravel Hill Road and MD 550 (residential and limited industrial), the planned industrial area south of Town limits between S. Main Street and the railroad tracks, and an 80-acre parcel on the east side of MD 194 below the Lewis Farm. This boundary would provide for 474 new housing units and 1,470 new residents.

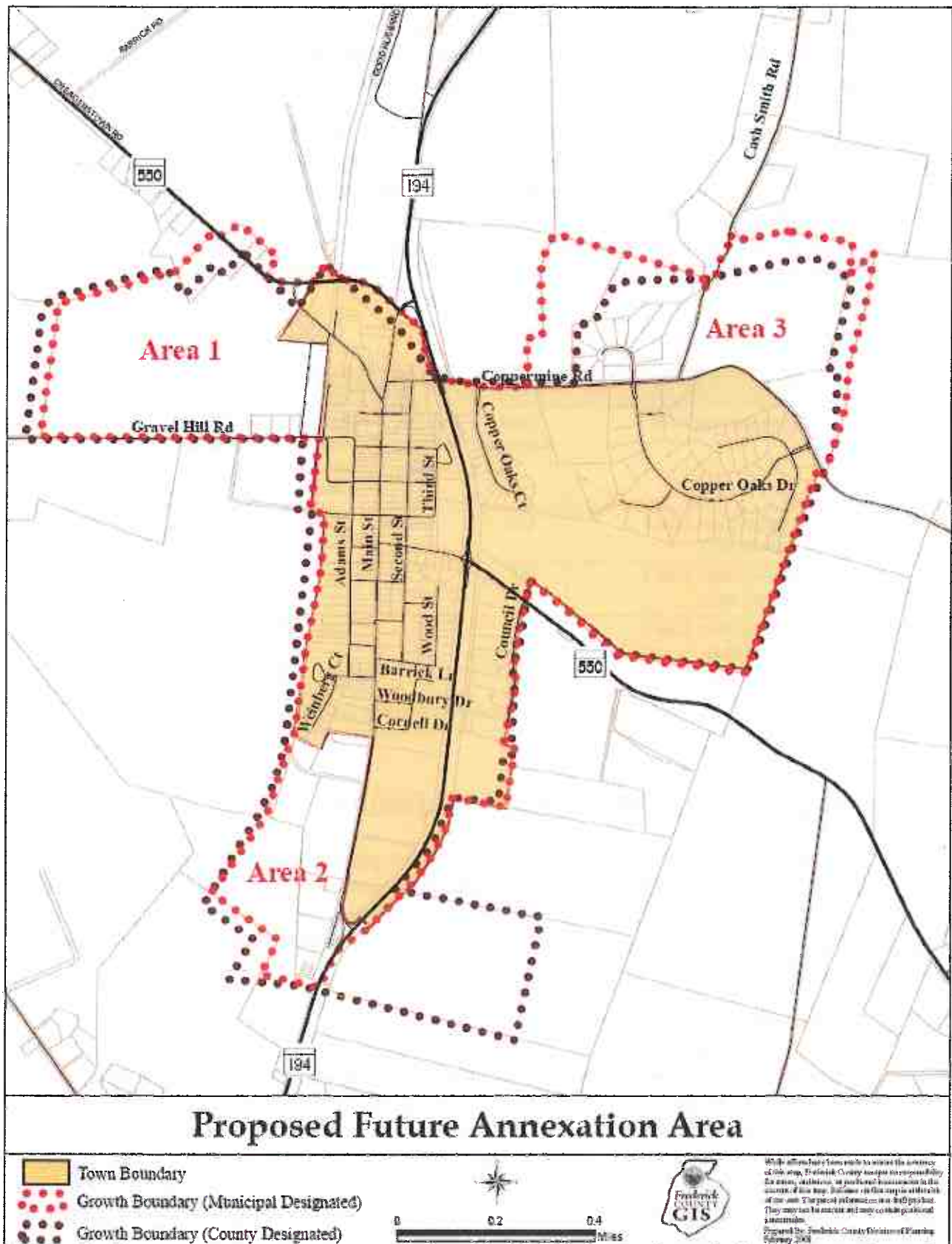
Municipal Growth Boundary – Town Delineated

The Woodsboro Planning and Zoning Commission (P&Z Commission) reviewed the County-designated boundary and proposed a Woodsboro Municipal Growth Boundary (MGB). Several differences exist between the Town and County boundaries; first, the Town's delineation excludes an 80-acre parcel of land east of MD 194 adjacent to the permanently protected Lewis Farm. The Town's proposed MGB includes the full extent of Spring Mill Estates and the Sodaro, Drenning, and Whittington properties on the north side of Coppermine Road. The Burgess and Commissioner's reviewed the P&Z Commission's boundary and made one addition; they have included four (4) parcels of land along MD 550 that receive town services.

Annexation areas have been identified in each of the three directions where growth is feasible in Woodsboro: northwest, northeast and south. These distinct areas are intended to develop in three stages, with the third area developing outside of the 20-year scope of this plan (see Proposed Future Annexation Area map). The timing of development for these three areas will be controlled by zoning, the annexation process, and available water and sewer service, in addition to other factors such as landowner interest, demand, the housing market, and the regional economy.

The northwestern area (Area 1), situated between MD Route 550 and Gravel Hill Road, offers more than 100 acres that could accommodate residential and recreational development. The Town has targeted the larger farm property for a west side park facility. There are 9 existing houses here. Area 1 has the potential to support up to 238 housing units and 738 people; this exceeds the 20-year population projections for Woodsboro of 540 people. One landowner has discussed development options for their property with the Town. This property is a priority for annexation and is recommended for development in phases over and beyond the 20-year planning period.

Area 2, comprised of 61 acres, is bounded by Main Street to the east and the railroad to the west. The properties located here currently have general commercial, limited industrial, or general industrial zoning in the County; several parcels of land are vacant. Development of Area 2 provides a natural extension of the existing community and could most easily connect to the



town's water and sewer service and other infrastructure. With the anticipated development of the property on the east side of Main Street, a plan for Area 2 could promote a revitalized, mixed-use area along Main Street's south end. There are 3 existing housing units here; 60 housing units and 184 people could be accommodated by annexation and subdivision.

Finally, the properties located in the northeastern area (Area 3) were identified as existing residential uses that may be appropriate to tie in to Town services in the future. The undeveloped land in Area 3 could accommodate up to 162 housing units and 502 people. This estimate is the maximum development potential of this area; there are steep slopes and the Israel Creek floodplain to contend with in Area 3 that could pose limitations on future development. This annexation area is not a current priority, but was identified as a potential annexation area in light of Woodsboro's growth constraints.

Table 14: Woodsboro's Future Annexation Area				
Annexation Area	Total Acreage	Existing Housing Units	Potential Additional Housing Units	Potential Additional Population
Annexation Area 1 (northwest)	115	9	238	738
Annexation Area 2 (south end)	61	3	60	184
Annexation Area 3 (northeast)	122	15	162	502
Total	298	27	460	1,424
Source: Frederick County Mapping and Data Services, July 2007.				

Growth's Impact on Public Services and Facilities

Adequate public services and facilities should be provided for projected future growth. This section is intended to offer detail on the potential impacts of growth to Woodsboro's public schools, libraries, public safety, water and sewerage service, stormwater management, and recreation facilities. The section concludes with a discussion on protecting sensitive areas around the community.

Public Schools

Currently, students from Woodsboro attend the New Midway/Woodsboro Elementary School, Walkersville Middle School and Walkersville High School. School capacity is affected by growth in the region, but Woodsboro has not been a major factor in regional capacity issues. In fact, proposed elementary and middle school symbols which were present on the County's 1995 Walkersville Region Plan were removed from the Woodsboro area during the 2006 Plan update. These planned schools were moved south to the MD 26 corridor, where the majority of regional growth is concentrated.

Frederick County conducted a Pupil Yield Study in 2005 to determine the number of students generated by development of certain housing types (i.e. single family detached, town house, multi-family). A goal of the study was to develop a more sophisticated procedure for projecting student enrollment at the County's elementary, middle and high schools.

The 175 housing units projected for Woodsboro over the next 20 years would generate 84 new students. Of the 84 students, there would be 37 elementary, 20 middle, and 27 high school students. The pupil yield factor used is the average yield for the "All Dwelling" category (combines all housing types) of 0.21 elementary school, 0.11 middle school, and 0.15 high school. The average yield was used since the actual mix of housing units is difficult to project.

Libraries

There are no County-owned public libraries located in Woodsboro or planned for Woodsboro within the 20-year context of the Walkersville Region Plan. Library service is offered through the C. Burr Artz Public Library in the City of Frederick and a branch library in Walkersville. A new 15,000 square foot library is planned to replace the existing facility in Walkersville by 2010. The town is interested in providing a library for its residents and intends to evaluate the need and feasibility in the next few years.

Public Safety

A majority of landowners in Woodsboro expressed a need for an increased police presence during the public participation efforts leading to the Plan update. In fact, security and protection were selected as a highest priority by 75% of respondents to the Citizen Survey when asked which aspects of Town need improvement. Police protection received the only "D" grade when respondents were asked to rate Town services. Vandalism, drug enforcement and speeding were listed as concerns. Currently, the County Sheriff's Department and the State Police provide service to the Town. There are no plans to hire police officers by the Town.

There is a Fire and Rescue Station located in the Town of Woodsboro. The current facility is adequate to meet the needs of the community. There are no additions or major improvements planned for the next twenty years.

Water and Sewerage Facilities

The Town of Woodsboro maintains its own water and sewerage systems serving 439 local households. The Maryland Department of the Environment (MDE) oversees Woodsboro's water allocation. At present, there are between 1 and 10 water taps available for new development. Any additional growth to the Town will require negotiation of a new appropriation permit between the Town and MDE and identification of a new water source. The Town has identified a potential future source of water and is currently negotiating with the State and landowner for access and use. Water studies are being conducted to determine the viability of this source as a public water supply. The Town is aware that water supply is a limiting factor to new growth in Woodsboro.

The Town's sewage treatment plant was recently upgraded in terms of its infrastructure and capacity. The plant's current capacity is 250,000 gallons per day (gpd). The MDE assumes that household needs are 250 gpd each of water and sewage generation. Given that estimate, Woodsboro can serve 1,000 total households. There are approximately 439 households connected to the Town's sewage system at present.

While sewage treatment capacity is not a limiting factor in Woodsboro's growth plan, the discharge of effluent from the treatment plant will require review over time. The assimilative capacity of Israel Creek to handle discharge from the plant will be a factor in the Town's long-term growth strategy.

The provision of water and sewer service will need to accommodate the additional 540 people anticipated to reside in Woodsboro by 2027. These residents will require approximately 135,000 gpd of water and sewer service. The Town's sewage system capacity appears capable of serving the additional population. As mentioned, the Town will need to acquire new sources of drinking water to serve this population.

Stormwater Management

Currently, developers are subject to stormwater management laws that require sediment fencing, construction of stormwater management ponds, and other best management practices. In 2007, the Maryland legislature passed HB 786, which will update these requirements ensuring that developers control runoff and implement environmentally sensitive design practices.

The Woodsboro Planning and Zoning Commission reviews subdivision plans within the Town's jurisdiction and makes recommendations related to slope, vegetation and impervious surface. Limited regulations are provided for in the Subdivision Regulations. At present, the County's Division of Permitting and Development Review reviews subdivision improvement plans for the Town and applies the current state and/or federal stormwater guidelines.

Recreation Facilities

The Town of Woodsboro operates an 87-acre park along MD 550. This park offers passive and active recreation opportunities. The major constraint associated with this park is its location on the east side of MD 194. The downtown area and majority of households in Woodsboro are located on the west side of MD 194. Discussions are in place to either provide a safe pedestrian access to the park over MD 194 in the form of a bridge/overpass and/or develop a park facility on the west side of Town.

Woodsboro's Rural Buffer and Sensitive Areas Protection

Currently, Woodsboro has 219-acres of land on its western edge in permanent preservation. Another 61-acres is protected along MD 194 south of Town. The floodplain of Israel Creek and the mineral mining activities will keep sprawl-style development from creeping up to the Town's corporate boundary. The Walkersville Region is home to highly productive farmland and will continue to be a priority area for state and local preservation programs.

Future Land Use Planning

Land Use Goals

- Concentrate compatible, mixed-use development along the north and south ends of the Main Street corridor.
- Provide a mix of housing types supporting a multi-generational community.
- Continue to encourage small, locally owned businesses in Woodsboro with a focus on the existing Central Business District.
- Provide identifiable and distinct gateway entrances to the community from the three MD 194 intersections.
- Provide an accessible and viable Industrial Park that is integrated with the community and adjacent land uses.
- Promote the Town's land use plan and vision to the general public.

Woodsboro's Land Use Designations

This Plan recommends eight (8) land use plan designations. They are: Parkland/Open Space; Low Density Residential; Medium Density Residential; Neighborhood Mixed Use; Town Center; General Commercial; Light Industrial; and Institutional. The policies for each land use plan designation are listed in Table 15, below.

Table 15: Comprehensive Land Use Designations Town of Woodsboro	
Land Use Designation	Description
Parkland/Open Space	Includes sensitive/resource areas (i.e. 100-year floodplains, highly erodible soils, steep slopes, and wildlife habitat) and land in public or quasi-public ownership for public use or open space protection.
Low-Density Residential	Encourages single-family detached, low-density residential development at a range of 3.5 to 5 housing units per acre.
Medium-Density Residential	Encourages concentrated, single family, townhouse, and multi-family residential development with a density range of 5 to 7 housing units per acre.
Neighborhood/Mixed Use	Encourages a mix of residential and commercial uses at a lower density than the town center area.
Town Center	Encourages a mix of residential uses and commercial activities in the historic downtown.
General Commercial	Sets aside land areas for highway services and general commercial activities where residential development should not be permitted.
Light Industrial	Encourages employment uses along the railroad and within the existing Woodsboro Industrial Park.
Institutional	These are areas with existing or planned academic, governmental, or religious uses.

Woodsboro's Zoning Districts

The recommended Woodsboro zoning districts are described in Table 16. Further detail related to allowable uses, minimum area, and setbacks for each district can be found in the Town's Zoning Ordinance.

The existing Town Zoning Ordinance includes a Rural Reserve District, which is intended to encourage the conservation of agricultural and open land, to assure the continuing agricultural potential and beauty of those areas at the periphery of the community and to provide very low density residential development with concentration on good land management and harmony with the physical environment. This Plan recommends that the Rural Reserve be deleted from the Woodsboro Zoning Ordinance following the update of the Comprehensive Plan. The Rural Reserve description and policy is inconsistent with Smart Growth principles and the County's Community Concept Policy, which directs growth to municipalities and designated growth areas. There is no land zoned Rural Reserve in the Town of Woodsboro at present. This is an antiquated, unused district that can be removed from the Ordinance.

This Plan also recommends renaming the previous B-1 Neighborhood Business District to NMX Neighborhood Mixed Use District. Amendments to the District's permitted uses would include the addition of single-family attached dwellings, or duplexes and townhouses. The description and use chart would mirror the R-2 District for lot size, width and setbacks. This amendment would facilitate a mixed-use development for the south end of Town and maximize the Town's limited land and water resources.

Finally, this plan recommends that the existing Highway Service District be renamed General Commercial District and amended to achieve the original intent of the B-1 Neighborhood Business District. Before the B-1 District was amended to allow residential uses, its purpose was to permit the convenience of having a limited number of frequently used retail and service needs in close proximity to residents. The purpose of the Highway Service category has become obsolete; the few areas planned for General Commercial uses could support the uses from the previous Highway Service and/or B-1 Neighborhood Business Districts.

Table 16: Proposed Zoning Districts
Town of Woodsboro

Zoning Districts	Descriptions
<i>Residential</i>	
R-1 Low-Density Residential	This district promotes the development of single-family detached homes with a minimum lot size of 8,000 square feet. The maximum permitted housing density is 5 units per acre.
R-2 Medium-Density Residential	This district encourages compact development and a variety of housing types. Single family detached, duplexes, townhouses, and multi-family housing are permitted. Minimum lot area ranges from 6,000 square feet for single-family detached units to 1,600 square feet for townhouses. Multi-family units do not have a minimum lot area; however the minimum area per dwelling unit is 3,000 square feet. The maximum permitted housing density for single-family detached units is 7 units per acre.
<i>Commercial and Mixed Use</i>	
CBD Central Business District	The CBD is the hub of commercial activity for the community. The district permits single-family detached, single-family attached, and multi-family dwellings. Public buildings, grocery and drug stores, restaurants, lodging, retail, specialty shops and business and professional offices of any nature are encouraged here. There is no minimum lot area, lot width, or front yard setback associated with the CBD.
GC General Commercial District	The GC District permits a larger range of conventional, commercial uses that may be inappropriate for the central business district. Allowable uses include banks, service stations, restaurants, lodging, retail, services, and business and professional offices. The district regulations will combine the use table and requirements of the previous Highway Service and Neighborhood Business districts.
NMX Neighborhood Mixed Use District	The NMX District is a mixed-use residential and commercial district. Multiple uses in a single structure are encouraged here, particularly fronting on Main Street. The district allows single-family detached, single-family attached, and multi-family residential units as well as public buildings, grocery and drug stores, specialty shops, services, and automobile service shops. The proposed lot size and density requirements for the NMX District will follow the R-2 District guidelines.
<i>Industrial</i>	
IP Industrial Park	The IP District encourages both heavy commercial and light industrial uses. Permitted uses include light manufacturing, research and development, warehousing and storage, and automobile-related uses. Junkyards and auto salvage yards are not permitted. There is no minimum lot area or width specified for this district.
<i>Open Space</i>	
OS Open Space	This district provides permanent open space for its natural beauty and ecological and recreational value. Permitted uses in the OS District include farms and nurseries, parkland, cemeteries, wildlife preserves, schools, churches and other public buildings, and municipal public works buildings.

Land Use Plan

The land use plan for the Town of Woodsboro includes recommended land use designations for the land situated within its current corporate limits as well as the properties identified within the municipal growth boundary and future annexation area. The justification for delineation of the municipal growth boundary and annexation area can be found in the preceding Municipal Growth chapter. The land use plan map depicts the type and location of development that is projected for Woodsboro.

Residential Land Use

Within the municipal boundary of the Town of Woodsboro, 233 acres of land are designated for residential uses in the land use plan (see Table 17). The majority of designated land is in the Low Density Residential category and is developed. The Neighborhood Mixed Use designation has 15 acres available for new development. Together, there are 23 acres available for residential development. Approximately 77 new housing units could be developed on that land. The potential additional population to the Town of Woodsboro is 239 based on an average household size of 3.1.

Table 17: Residential Land Use Plan - Town of Woodsboro <i>Land located within the current town limits</i>				
Land Use Designation	Acres Designated	Acres Undeveloped	Maximum Potential Housing Units (hu)	Potential Additional Population
Low Density Residential (LDR)	174	7	17	53
Medium Density Residential (MDR)	3	0	0	0
Neighborhood Mixed Use (NMX)	24	15	53	164
Town Center (TC)	17	1	7	22
Total	233 acres	23 acres	77 hu's	239
Source: Frederick County Mapping and Data Services, July 2007. 1. Potential housing units based on development of 70% of the total acreage at average density rates identified for each land use designation. 2. Average density rates: LDR = 3.5hu/acre; MDR = 5hu/acre; NMX = 5hu/acre; TC = 10hu/acre 3. Potential population based on an average household size in Woodsboro of 3.1.				

Less than one-half of Woodsboro's 20-year population projection of 540 additional people could be accommodated by land designated for residential uses within the current town limits. Annexation of land outside of town limits can be expected to provide housing for the new population. As discussed in the Municipal Growth chapter, the municipal growth boundary and future annexation area include an inventory of land that exceeds the twenty-year needs of the town. The annexation area is to be viewed in development stages where the northwest area is developed first, followed by the annexation area to the south and finally the annexation area to the northeast. The total development potential of Woodsboro's future annexation area is shown in Table 18.

Table 18: Residential Land Use Plan - Woodsboro's Future Annexation Area
Land located outside of the current town limits

Land Use Designation	Acres Designated	Acres Undeveloped	Maximum Potential Housing Units (hu)	Potential Additional Population
<i>Annexation Area 1</i>				
Low Density Residential (LDR)	109	97	238	738
Neighborhood Mixed Use (NMX)	1	1	4	11
<i>Annexation Area 2</i>				
Medium Density Residential (MDR)	17	17	60	184
Neighborhood Mixed Use (NMX)	1	0	0	0
<i>Annexation Area 3</i>				
Low Density Residential (LDR)	97	66	162	502
Total	220 acres	187 acres	464 hu's	1,435

Source: Frederick County Mapping and Data Services, July 2007.

1. Potential housing units based on development of 70% of the total acreage at average density rates identified for each land use designation.
2. Average density rates: LDR = 3.5hu/acre; MDR = 5hu/acre; NMX = 5hu/acre; TC = 10hu/acre
3. Potential population based on an average household size in Woodsboro of 3.1.

The future annexation area includes 220 acres of land designated for residential uses, most of which is currently undeveloped. The largest inventory of undeveloped land in the future annexation area is in the Low Density Residential (LDR) category. The LDR land use is located in the northwest and northeast annexation areas. There are 163 undeveloped acres of land in this land use designation. Approximately 400 additional housing units could be constructed on this land. Assuming that each housing unit in Woodsboro supports 3.1 persons, 1,240 new residents would be projected.

There is 17 acres of Medium Density Residential (MDR) land use located on Main Street at the south end of Town. This land bay is situated across the street from an area of undeveloped land zoned Neighborhood Mixed Use and within town limits. This area could most easily tie in to the Town's existing infrastructure and has the potential to enhance the southern gateway entrance into Woodsboro. Sixty housing units could be accommodated here serving a potential population of 184 people. Coupled with full build-out of the Town's land use plan depicted in Table 16, 423 new people could be served by MDR development at the south end.

Commercial and Industrial Land Use

The 20-year land use plan depicts 126 acres designated for commercial and industrial areas. Of the total acreage, 52 acres are undeveloped. Thirty-four acres are undeveloped in the Light Industrial land use designation. Most of that land is situated along the railroad on the south end of Town. There is limited development potential in the Town Center and General Commercial land use designations. Comprehensive plan goals and objectives referenced at the end of this chapter discuss redevelopment of existing commercial and industrial areas as an option.

Table 19: 20-Year Land Use Plan - Commercial and Industrial Town of Woodsboro and its Municipal Growth Area			
Land Use Designation	Acres Designated	Acres Developed	Acres Undeveloped
Within Town Limits			
Town Center	17	16	1
Neighborhood Mixed Use	24	9	15
General Commercial	6	5	1
Light Industrial	34	22	12
Subtotal	81	52	29
Outside Town Limits, within Municipal Growth Boundary			
Neighborhood Mixed Use	2	1	1
General Commercial	9	9	0
Light Industrial	34	12	22
Subtotal	45	22	23
TOTAL	126	74	52
Source: Frederick County Mapping and Data Services, July 2007.			

Recommended Zoning

To accommodate the recommended changes to the Woodsboro Zoning Districts, the Highway Service District would become the General Commercial District and the B-1 Neighborhood Business District would become the Neighborhood Mixed Use District. No other changes are proposed. The information below correlates with the data in the Municipal Growth chapter.

Table 20: Recommended Zoning Town of Woodsboro				
Zoning District	Acreage Zoned	Acreage Developed	Acreage Undeveloped	Existing Housing Units
Open Space	113	1	112	0
R-1 Low Density Residential	176	144	32	257
R-2 Medium Density Residential	2	2	0	6
NMX Neighborhood Mixed Use	40	12	28	46
CBD Central Business District	17	16	1	76
GC General Commercial	3	3	0	0
IP Industrial Park	35	19	16	0
TOTALS	386	197	189	385
Source: Frederick County Mapping and Data Services, July 2007.				

Municipal Growth and Land Use Goals, Objectives and Action Items

Goal 1: Manage the rate of growth to be consistent with the provision of adequate services and infrastructure.

Objective 1: Coordinate the land use plan with the Town's Capital Improvements Program.

Action Item: The Town Board should review the recommendations of the comprehensive plan and make determinations on whether items need to be added to their CIP.

Objective 2: Ensure that services and infrastructure are provided before or with any new planned development.

Action Item: Initiate a Public Works Agreement with property owners/developers on all major residential, commercial and industrial development projects in Woodsboro to ensure adequate improvements and infrastructure are provided.

Action Item: Review the Subdivision Regulations and make amendments if needed allowing the Town to request necessary improvements from developers.

Action Item: The Planning and Zoning Commission will make a recommendation to the Town Board on the need for an Adequate Public Facilities Ordinance.

Goal 2: Continue to coordinate annexation plans and comprehensive planning efforts with Frederick County government.

Objective 1: Consider developing a Joint Annexation Agreement with Frederick County to guide future annexations and comprehensive planning efforts.

Goal 3: To concentrate compatible, mixed-use development along the north and south ends of the Main Street corridor.

Objective 1: To encourage redevelopment and revitalization of the Central Business District on the north end of Main Street.

Action Item: Research programs to stimulate revitalization in this section of downtown.

Action Item: Review and update the setbacks, lot size and density requirements for the Central Business District in the Zoning Ordinance.

Objective 2: To plan for new, mixed use residential and commercial areas on the south end of Main Street, from the intersection with MD 194 to the Mt. Hope Cemetery.

Action Item: The Planning and Zoning Commission will recommend renaming the B-1 Neighborhood Business Zoning District to Neighborhood Mixed Use Zoning District and will amend the district requirements to allow diverse housing options and multiple uses in a single structure.

Goal 4: To provide a mix of housing types supporting a multi-generational community.

Objective 1: Review the Zoning Ordinance to ensure that diverse housing types are encouraged, rather than discouraged in the various residential districts.

Objective 2: Consider amending the B-1 Neighborhood Business District to allow for a mix of housing types to support moderately priced dwelling units and affordable housing for the elderly.

Goal 5: To continue to encourage small, locally owned businesses in Woodsboro with a focus on the existing Central Business District.

Objective 1: Design a brochure highlighting the businesses and services available in Woodsboro and distribute to residents and visitors.

Objective 2: Host a monthly or seasonal event on Main Street to support local businesses.

Objective 3: Reach out to small and local business owners to determine their needs and interest in community involvement and activities.

Objective 4: Advertise a summer intern position to coordinate economic development and Main Street goals.

Goal 6: To provide identifiable and distinct gateway entrances to the community from the three MD 194 intersections.

Objective 1: Host a design contest to solicit ideas for the gateway entrances.

Objective 2: In the alternative, hire a design consultant to prepare concept drawings for the three gateways.

Goal 7: To provide an accessible and viable Industrial Park that is integrated with the community and adjacent land uses.

Objective 1: Consider a redevelopment plan for the Industrial Park.

Action Item: Meet with the land and business owners at the park to assess their needs, discuss potential improvements, and gauge their interest in a redevelopment effort by the Town.

Action Item: Create a steering committee to address the concerns at the park and develop an action plan.

Action Item: Work with a graduate student at a local college or university to design a redevelopment plan for the Industrial Park.

Objective 2: Providing permanent vegetative screening on both sides of MD Route 194, between the two bypass intersections, in order to provide screening from commercial/industrial facilities as well as a road noise sound barrier for residences along that corridor.

Action Item: Work with landowners to identify a new Forest Resource Ordinance planting area parallel to MD 194 within the current Industrial Park.

Action Item: Research state street tree planting programs for their applicability to the Industrial Park revitalization effort.

Goal 8: To promote the Town's land use plan and vision to the general public.

Objective 1: Make copies of the Plan available to the public at the Town office and on the Town's web site.

Objective 2: Use the Town's 20-year land use plan map as a guide for all future land use and development decisions.

Objective 3: Create a development guidance report that explains the Town's vision for future development of targeted neighborhood and business districts in Woodsboro.

